

### 30228T106/DB

Matched tapered roller bearings arranged back-to-back (O-arrangement, load lines diverge towards the bearing axis) accommodate high radial loads, axial loads in both directions, and tilting moments. The precision manufactured intermediate rings between the inner and outer rings enable a defined internal clearance or preload to be achieved when mounted. Matched tapered roller bearings are typically used in gearboxes, hoisting equipment, rolling mills, and machines in the mining industry.



- High radial load carrying capacity
- Designed for axial loads in both directions
- Accommodate tilting moments
- Relatively high stiffness
- Surface finish on the contact surfaces of the rollers and raceways that enhances operational reliability



| Dimensions       |             |                                  |
|------------------|-------------|----------------------------------|
| d                | 140 mm      | Bore diameter                    |
| D                | 250 mm      | Outside diameter                 |
| T                | 106 mm      | Total width                      |
| d <sub>1</sub>   | ≈ 187.12 mm | Shoulder diameter of inner ring  |
| C                | 86.5 mm     | Width of outer rings             |
| l                | 14.5 mm     | Width of spacer ring             |
| b                | 5.5 mm      | Width of lubrication groove      |
| K                | 4 mm        | Diameter of lubrication hole     |
| r <sub>1,2</sub> | min. 4 mm   | Chamfer dimension                |
| r <sub>5</sub>   | min. 1 mm   | Chamfer dimension                |
| a                | 109.301 mm  | Distance between pressure points |



### Abutment dimensions

|       |               |                                                               |
|-------|---------------|---------------------------------------------------------------|
| $d_b$ | min. 156.5 mm | Diameter of shaft abutment                                    |
| $D_b$ | min. 234 mm   | Diameter of housing abutment                                  |
| $C_b$ | min. 9.5 mm   | Minimum width of space required in housing on small side face |
| $r_a$ | max. 4 mm     | Radius of fillet                                              |
| $r_c$ | max. 1 mm     | Radius of fillet                                              |

### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 773 kN      |
| Basic static load rating  | $C_0$ | 1 140 kN    |
| Fatigue load limit        | $P_u$ | 116 kN      |
| Reference speed           |       | 1 500 r/min |
| Limiting speed            |       | 2 600 r/min |
| Limiting value            | e     | 0.43        |
| Calculation factor        | $Y_1$ | 1.6         |
| Calculation factor        | $Y_2$ | 2.3         |
| Calculation factor        | $Y_0$ | 1.6         |

### Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal + CL7C, P5, total width
- Internal clearance: values

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit