

687/672



Single row tapered roller bearings are designed to accommodate combined radial and axial loads and provide low friction during operation. The inner ring, with rollers and cage, can be mounted separately from the outer ring. These separable and interchangeable components facilitate mounting, dismounting and maintenance. By mounting one single row tapered roller bearing against another and applying a preload, a rigid bearing application can be achieved.

- High radial and axial load carrying capacity
- Accommodate axial loads in one direction
- Low friction and long service life
- Separable and interchangeable components

Dimension series

675



| Dimensions       |             |                                      |
|------------------|-------------|--------------------------------------|
| d                | 101.6 mm    | Bore diameter                        |
| D                | 168.275 mm  | Outside diameter                     |
| T                | 41.275 mm   | Total width                          |
| d <sub>1</sub>   | ≈ 133.4 mm  | Shoulder diameter of inner ring      |
| B                | 41.275 mm   | Width of inner ring                  |
| C                | 30.162 mm   | Width of outer ring                  |
| r <sub>1,2</sub> | min. 3.5 mm | Chamfer dimension of inner ring      |
| r <sub>3,4</sub> | min. 3.3 mm | Chamfer dimension of outer ring      |
| a                | 38.246 mm   | Distance side face to pressure point |



### Abutment dimensions

|       |               |                                                               |
|-------|---------------|---------------------------------------------------------------|
| $d_a$ | max. 114 mm   | Diameter of shaft abutment                                    |
| $d_b$ | min. 116 mm   | Diameter of shaft abutment                                    |
| $D_a$ | min. 143 mm   | Diameter of housing abutment                                  |
| $D_a$ | max. 155.5 mm | Diameter of housing abutment                                  |
| $D_b$ | min. 157 mm   | Diameter of housing abutment                                  |
| $C_a$ | min. 6 mm     | Minimum width of space required in housing on large side face |
| $C_b$ | min. 11 mm    | Minimum width of space required in housing on small side face |
| $r_a$ | max. 3.5 mm   | Radius of shaft fillet                                        |
| $r_b$ | max. 3.3 mm   | Radius of housing fillet                                      |

### Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| AGA performance class     |       | AGA Explorer |
| Basic dynamic load rating | C     | 288 kN       |
| Basic static load rating  | $C_0$ | 365 kN       |
| Fatigue load limit        | $P_u$ | 39 kN        |
| Reference speed           |       | 3 000 r/min  |
| Limiting speed            |       | 3 800 r/min  |
| Limiting value            | e     | 0.48         |
| Calculation factor        | Y     | 1.25         |
| Calculation factor        | $Y_0$ | 0.7          |

### Tolerances and clearances

## GENERAL BEARING SPECIFICATIONS

- Tolerances:  
bearings: Normal and CL7C, CLN  
inch bearings: Normal and CL, deviating width

## BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

AGA BEARINGS