

C 6910 V



CARB toroidal roller bearings are unique: as well as accommodating misalignment without increased stress levels, they also provide frictionless axial movement within the bearing in the non-locating position in self-aligning bearing arrangements. This full complement bearing, which has a lower speed rating, uses as many rollers as possible, giving it the highest possible load rating.

- Accommodate misalignment and axial displacement within the bearing
- Very high radial load carrying capacity
- Provide frictionless axial movement
- Long bearing system life

| Bore type | Cylindrical      |                                                   |
|-----------|------------------|---------------------------------------------------|
|           | Dimensions       |                                                   |
|           | d                | 50 mm Bore diameter                               |
|           | D                | 72 mm Outside diameter                            |
|           | B                | 40 mm Width                                       |
|           | d <sub>2</sub>   | ≈ 57.5 mm Shoulder diameter of inner ring         |
|           | D <sub>1</sub>   | ≈ 65 mm Shoulder or recess diameter of outer ring |
|           | s <sub>1</sub>   | max. 9.4 mm Permissible axial displacement        |
|           | s <sub>2</sub>   | max. 6.4 mm Permissible axial displacement        |
|           | r <sub>1,2</sub> | min. 0.6 mm Chamfer dimension                     |

|  |                     |                                         |
|--|---------------------|-----------------------------------------|
|  | Abutment dimensions |                                         |
|  | d <sub>a</sub>      | min. 53.2 mm Diameter of shaft abutment |
|  | d <sub>a</sub>      | max. 61 mm Diameter of shaft abutment   |
|  | D <sub>a</sub>      | max. 68.8 mm Abutment diameter housing  |
|  | r <sub>a</sub>      | max. 0.6 mm Radius of fillet            |

## Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| AGA performance class     |                | AGA Explorer |
| Basic dynamic load rating | C              | 140 kN       |
| Basic static load rating  | C <sub>0</sub> | 224 kN       |
| Fatigue load limit        | P <sub>u</sub> | 26 kN        |
| Limiting speed            |                | 2 400 r/min  |
| Misalignment factor       | k <sub>1</sub> | 0.093        |
| Internal clearance factor | k <sub>2</sub> | 0.113        |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P5, tapered bore 1:12, tapered bore 1:30
- Radial internal clearance: cylindrical bore, tapered bore

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit