

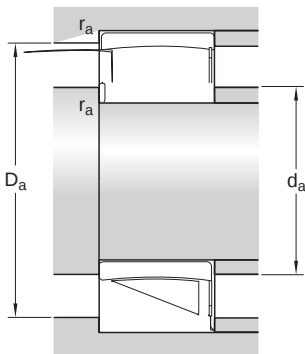
C 2209 V



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                | 45 mm Bore diameter                                 |
|           | D                | 85 mm Outside diameter                              |
|           | B                | 23 mm Width                                         |
|           | d <sub>2</sub>   | ≈ 55.6 mm Shoulder diameter of inner ring           |
|           | D <sub>1</sub>   | ≈ 73.1 mm Shoulder or recess diameter of outer ring |
|           | s <sub>1</sub>   | max. 7.1 mm Permissible axial displacement          |
|           | s <sub>2</sub>   | max. 4.1 mm Permissible axial displacement          |
|           | r <sub>1,2</sub> | min. 1.1 mm Chamfer dimension                       |
|           |                  |                                                     |



| Abutment dimensions |            |                            |
|---------------------|------------|----------------------------|
| d <sub>a</sub>      | min. 52 mm | Diameter of shaft abutment |
| d <sub>a</sub>      | max. 69 mm | Diameter of shaft abutment |
| D <sub>a</sub>      | max. 78 mm | Abutment diameter housing  |
| r <sub>a</sub>      | max. 1 mm  | Radius of fillet           |

## Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| AGA performance class     |                | AGA Explorer |
| Basic dynamic load rating | C              | 106 kN       |
| Basic static load rating  | C <sub>0</sub> | 110 kN       |
| Fatigue load limit        | P <sub>u</sub> | 12.9 kN      |
| Limiting speed            |                | 4 300 r/min  |
| Misalignment factor       | k <sub>1</sub> | 0.095        |
| Internal clearance factor | k <sub>2</sub> | 0.128        |

## 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