

24172-2CS5/VT143

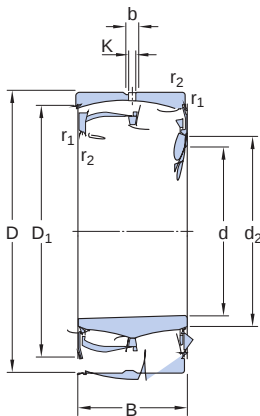


Spherical roller bearings can accommodate heavy loads in both directions. They are self-aligning and accommodate misalignment and shaft deflections, with virtually no increase in friction or temperature. Under normal operating conditions, sealed bearings are almost maintenance-free, keeping service costs and grease consumption low. The design includes features to facilitate relubrication.

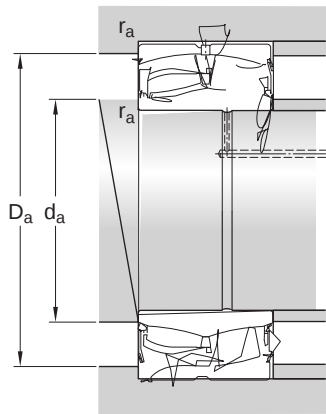
- Accommodate misalignment
- High load carrying capacity
- Sealed for increased reliability, with relubrication features
- Low friction and long service life
- Increased wear resistance

Bore type

Cylindrical



| Dimensions        |                |                                                |
|-------------------|----------------|------------------------------------------------|
| d                 | 360 mm         | Bore diameter                                  |
| t <sub>Δdmp</sub> | -0.04 – 0.0 mm | Deviation limits of mid-range bore diameter    |
| D                 | 600 mm         | Outside diameter                               |
| t <sub>ΔDmp</sub> | -0.05 – 0.0 mm | Deviation limits of mid-range outside diameter |
| B                 | 243 mm         | Width                                          |
| t <sub>ΔBs</sub>  | -0.4 – 0.0 mm  | Deviation limits of ring width                 |
| d <sub>2</sub>    | ≈ 395 mm       | Shoulder diameter of inner ring                |
| D <sub>1</sub>    | ≈ 535 mm       | Shoulder/recess diameter of outer ring         |
| b                 | 16.7 mm        | Width of lubrication groove                    |
| K                 | 9 mm           | Diameter of lubrication hole                   |
| r <sub>1,2</sub>  | min. 5 mm      | Chamfer dimension                              |
|                   | Normal         | ISO tolerance class for dimensions             |



Abutment dimensions

|       |             |                              |
|-------|-------------|------------------------------|
| $d_a$ | min. 380 mm | Diameter of shaft abutment   |
| $d_a$ | max. 395 mm | Diameter of shaft abutment   |
| $D_a$ | max. 580 mm | Diameter of housing abutment |
| $r_a$ | max. 4 mm   | Radius of fillet             |

Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| AGA performance class     |       | AGA Explorer |
| Basic dynamic load rating | C     | 5 749 kN     |
| Basic static load rating  | $C_0$ | 9 300 kN     |
| Fatigue load limit        | $P_u$ | 670 kN       |
| Limiting speed            |       | 240 r/min    |
| Limiting value            | e     | 0.37         |
| Calculation factor        | $Y_1$ | 1.8          |
| Calculation factor        | $Y_2$ | 2.7          |
| Calculation factor        | $Y_0$ | 1.8          |

Tolerances of run-out

|                                                            |           |             |
|------------------------------------------------------------|-----------|-------------|
| Range of section height at inner ring of assembled bearing | $t_{Kia}$ | 60 $\mu$ m  |
| Range of section height at outer ring of assembled bearing | $t_{Kea}$ | 100 $\mu$ m |
| ISO tolerance class for geoal tolerances                   |           | Normal      |

Radial internal clearance

|                           |             |
|---------------------------|-------------|
| Minimum initial clearance | 220 $\mu$ m |
|---------------------------|-------------|

Maximum initial clearance

340  $\mu\text{m}$

Tolerances of run-out

## GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, 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

AGA BEARINGS