

29336 E

Spherical roller thrust bearings accommodate very heavy axial and considerable radial loads. They have the highest load rating of all thrust bearings, enabling compact, high power density bearing arrangements. By combining two or more spherical roller thrust bearings, it is possible to create a bearing arrangement that is either self-aligning, allowing misalignment of the shaft, or very stiff.



| Dimensions       |           |                                                                                                                    |
|------------------|-----------|--------------------------------------------------------------------------------------------------------------------|
| d                | 180 mm    | Bore diameter                                                                                                      |
| D                | 300 mm    | Outside diameter                                                                                                   |
| H                | 73 mm     | Height                                                                                                             |
| d <sub>1</sub>   | ≈ 270 mm  | Outside diameter of shaft washer end side face                                                                     |
| D <sub>1</sub>   | ≈ 227 mm  | Shoulder diameter outer ring                                                                                       |
| B                | 46 mm     | Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage) |
| B <sub>1</sub>   | 66.2 mm   | Height shaft washer + cage                                                                                         |
| C                | 35.5 mm   | Height housing washer                                                                                              |
| s                | 103 mm    | Distance from shaft washer end side face to pressure point                                                         |
| r <sub>1,2</sub> | min. 3 mm | Chamfer dimension shaft washer                                                                                     |



Abutment dimensions

|          |             |                                  |
|----------|-------------|----------------------------------|
| $d_a$    | min. 235 mm | Diameter of shaft abutment       |
| $d_{b1}$ | max. 189 mm | Abutment diameter of spacer ring |
| $d_{b2}$ | max. 195 mm | Outside diameter of spacer ring  |
| $D_a$    | max. 262 mm | Diameter of housing abutment     |
| $r_a$    | max. 2.5 mm | Fillet radius                    |

Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 1 430 kN    |
| Basic static load rating  | $C_0$ | 4 300 kN    |
| Fatigue load limit        | $P_u$ | 440 kN      |
| Reference speed           |       | 1 200 r/min |
| Limiting speed            |       | 2 000 r/min |
| Minimum axial load factor | A     | 1.8         |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit