

29340 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                | 200 mm    | Bore diameter                                                                                                      |
| D                | 340 mm    | Outside diameter                                                                                                   |
| H                | 85 mm     | Height                                                                                                             |
| d <sub>1</sub>   | ≈ 304 mm  | Outside diameter of shaft washer end side face                                                                     |
| D <sub>1</sub>   | ≈ 257 mm  | Shoulder diameter outer ring                                                                                       |
| B                | 53.5 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>   | 76.7 mm   | Height shaft washer + cage                                                                                         |
| C                | 40 mm     | Height housing washer                                                                                              |
| s                | 116 mm    | Distance from shaft washer end side face to pressure point                                                         |
| r <sub>1,2</sub> | min. 4 mm | Chamfer dimension shaft washer                                                                                     |



### Abutment dimensions

|          |             |                                  |
|----------|-------------|----------------------------------|
| $d_a$    | min. 265 mm | Diameter of shaft abutment       |
| $d_{b1}$ | max. 211 mm | Abutment diameter of spacer ring |
| $d_{b2}$ | max. 224 mm | Outside diameter of spacer ring  |
| $D_a$    | max. 297 mm | Diameter of housing abutment     |
| $r_a$    | max. 3 mm   | Fillet radius                    |

### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 1 860 kN    |
| Basic static load rating  | $C_0$ | 5 500 kN    |
| Fatigue load limit        | $P_u$ | 550 kN      |
| Reference speed           |       | 1 000 r/min |
| Limiting speed            |       | 1 700 r/min |
| Minimum axial load factor | A     | 2.9         |

### Tolerances and clearances

#### GENERAL BEARING SPECIFICATIONS

- Tolerances: table

#### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit