

29438 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                | 190 mm    | Bore diameter                                                                                                      |
| D                | 380 mm    | Outside diameter                                                                                                   |
| H                | 115 mm    | Height                                                                                                             |
| d <sub>1</sub>   | ≈ 332 mm  | Outside diameter of shaft washer end side face                                                                     |
| D <sub>1</sub>   | ≈ 265 mm  | Shoulder diameter outer ring                                                                                       |
| B                | 73 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>   | 101 mm    | Height shaft washer + cage                                                                                         |
| C                | 55.5 mm   | Height housing washer                                                                                              |
| s                | 117 mm    | Distance from shaft washer end side face to pressure point                                                         |
| r <sub>1,2</sub> | min. 5 mm | Chamfer dimension shaft washer                                                                                     |



Abutment dimensions

|          |             |                                  |
|----------|-------------|----------------------------------|
| $d_a$    | min. 280 mm | Diameter of shaft abutment       |
| $d_{b1}$ | max. 207 mm | Abutment diameter of spacer ring |
| $d_{b2}$ | max. 223 mm | Outside diameter of spacer ring  |
| $D_a$    | max. 321 mm | Diameter of housing abutment     |
| $r_a$    | max. 4 mm   | Fillet radius                    |

Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 2 850 kN    |
| Basic static load rating  | $C_0$ | 8 000 kN    |
| Fatigue load limit        | $P_u$ | 765 kN      |
| Reference speed           |       | 950 r/min   |
| Limiting speed            |       | 1 700 r/min |
| Minimum axial load factor | A     | 6.1         |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit