



Image may differ from product. See technical specification for details.

30234

Single row tapered roller bearing

Single row tapered roller bearings are designed to accommodate combined radial and axial loads and provide low friction during operation. The inner ring, with rollers and cage, can be mounted separately from the outer ring. These separable and interchangeable components facilitate mounting, dismounting and maintenance. By mounting one single row tapered roller bearing against another and applying a preload, a rigid bearing application can be achieved.

- High radial and axial load carrying capacity
- Accommodate axial loads in one direction
- Low friction and long service life
- Separable and interchangeable components

Overview

Dimensions

| | |
|-------------------|----------|
| Bore diameter | 170 mm |
| Outside diameter | 310 mm |
| Width, total | 57 mm |
| Width, inner ring | 52 mm |
| Width, outer ring | 43 mm |
| Contact angle | 16.172 ° |

Performance

| | |
|---------------------------|-------------|
| Basic dynamic load rating | 657 kN |
| Basic static load rating | 865 kN |
| Reference speed | 1 500 r/min |
| Limiting speed | 2 000 r/min |

Properties

| | |
|---|------------------|
| Bearing part | Complete bearing |
| Number of rows | 1 |
| Locating feature, bearing outer ring | None |
| Bore type | Cylindrical |
| Cage | Sheet metal |
| Arrangement of contact angle (double-row bearing) | Not applicable |
| Matched arrangement | No |
| Coating | Without |
| Sealing | Without |
| Lubricant | None |
| Relubrication feature | Without |

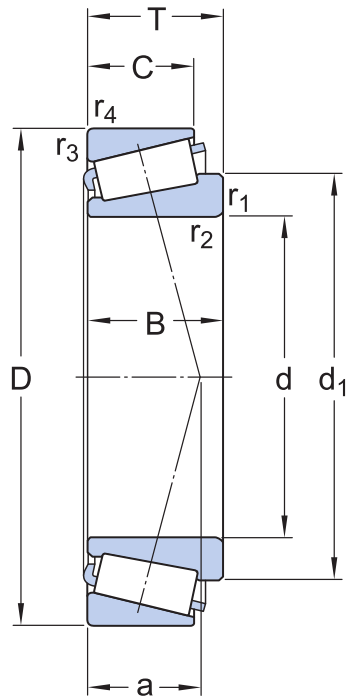
Logistics

| | |
|--------------------|-------------|
| Product net weight | 16.6 kg |
| eClass code | 23-05-09-10 |
| UNSPSC code | 31171516 |

Technical specification

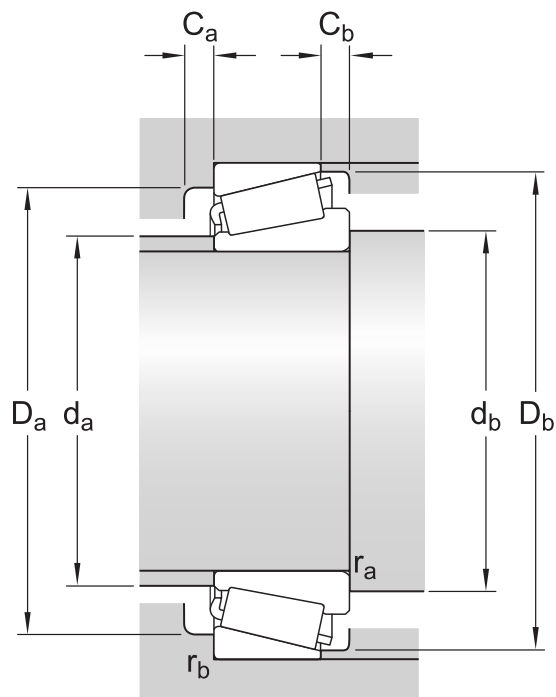
Dimension series

4GB



Dimensions

| | | |
|-----------|--------------------|--------------------------------------|
| d | 170 mm | Bore diameter |
| D | 310 mm | Outside diameter |
| T | 57 mm | Total width |
| d_1 | ≈ 231.3 mm | Shoulder diameter of inner ring |
| B | 52 mm | Width of inner ring |
| C | 43 mm | Width of outer ring |
| $r_{1,2}$ | min. 5 mm | Chamfer dimension of inner ring |
| $r_{3,4}$ | min. 4 mm | Chamfer dimension of outer ring |
| a | 58.46 mm | Distance side face to pressure point |



Abutment dimensions

| | | |
|-------|---------------|---|
| d_a | max. 203 mm | Diameter of shaft abutment |
| d_b | min. 189.5 mm | Diameter of shaft abutment |
| D_a | min. 269 mm | Diameter of housing abutment |
| D_a | max. 293.5 mm | Diameter of housing abutment |
| D_b | min. 288 mm | Diameter of housing abutment |
| C_a | min. 8 mm | Minimum width of space required in housing on large side face |
| C_b | min. 14 mm | Minimum width of space required in housing on small side face |
| r_a | max. 5 mm | Radius of shaft fillet |
| r_b | max. 4 mm | Radius of housing fillet |

Calculation data

| | | |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C | 657 kN |
| Basic static load rating | C_0 | 865 kN |
| Fatigue load limit | P_u | 83 kN |
| Reference speed | | 1 500 r/min |
| Limiting speed | | 2 000 r/min |
| Limiting value | e | 0.43 |
| Calculation factor | Y | 1.4 |

More Information

Product details

[Designs and variants](#)

[General bearing specifications](#)

[Loads](#)

[Temperature limits](#)

[Permissible speed](#)

[Design considerations](#)

[Bearing designations](#)

[Designation system](#)

Engineering information

[Principles of rolling bearing selection](#)

[General bearing knowledge](#)

[Bearing selection process](#)

[Bearing failure and how to prevent it](#)

Tools

[SimPro Quick](#)

[Bearing Select](#)

[Engineering Calculator](#)

[LubeSelect for SKF greases](#)

[Heater Selection Tool](#)

[Oil Injection Method Program](#)

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