



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

32040 X

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 | 200 mm |
|-------------------|--------|
| Outside diameter | 310 mm |
| Width, total | 70 mm |
| Width, inner ring | 70 mm |
| Width, outer ring | 53 mm |
| Contact angle | 16 ° |

Performance

| Basic dynamic load rating | 800 kN |
|---------------------------|-------------|
| Basic static load rating | 1 370 kN |
| Reference speed | 1 400 r/min |
| Limiting speed | 1 900 r/min |

Properties

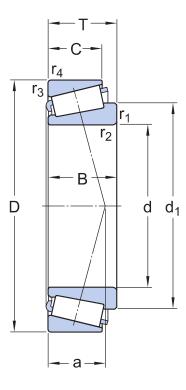
| Bearing part | Complete bearing |
|---|------------------|
| Number of rows | 1 |
| Locating feature, bearing outer ring | None |
| Bore type | Cylindrical |
| Cage | Sheet metal |
| Arrangement of contact angle (double-row bearing) | Not applicable |
| Matched arrangement | No |
| Coating | Without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

Logistics

| Product net weight | 18.6 kg |
|--------------------|-------------|
| eClass code | 23-05-09-10 |
| UNSPSC code | 31171516 |

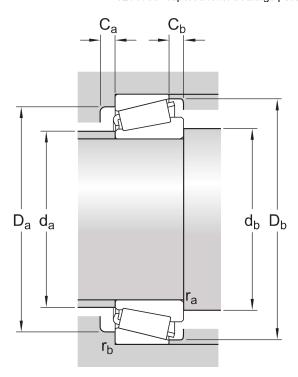
Technical specification

Dimension series 4FD



Dimensions

| d | 200 mm | Bore diameter |
|------------------|-------------|--------------------------------------|
| D | 310 mm | Outside diameter |
| Т | 70 mm | Total width |
| d ₁ | ≈ 254.78 mm | Shoulder diameter of inner ring |
| В | 70 mm | Width of inner ring |
| С | 53 mm | Width of outer ring |
| r _{1,2} | min. 3 mm | Chamfer dimension of inner ring |
| r _{3,4} | min. 2.5 mm | Chamfer dimension of outer ring |
| a | 66 mm | Distance side face to pressure point |



Abutment dimensions

| d _a | max. 222 mm | Diameter of shaft abutment |
|----------------|---------------|---|
| d_b | min. 215.5 mm | Diameter of shaft abutment |
| D _a | min. 273 mm | Diameter of housing abutment |
| D _a | max. 296.5 mm | Diameter of housing abutment |
| D_b | min. 297 mm | Diameter of housing abutment |
| C_a | min. 11 mm | Minimum width of space required in housing on large side face |
| C _b | min. 17 mm | Minimum width of space required in housing on small side face |
| r _a | max. 3 mm | Radius of shaft fillet |
| r _b | max. 2.5 mm | Radius of housing fillet |

Calculation data

| Basic dynamic load rating | С | 800 kN |
|---------------------------|-------------|-------------|
| Basic static load rating | C_0 | 1 370 kN |
| Fatigue load limit | $P_{\rm u}$ | 127 kN |
| Reference speed | | 1 400 r/min |
| Limiting speed | | 1 900 r/min |

| Limiting value | е | 0.43 |
|--------------------|----|------|
| Calculation factor | Υ | 1.4 |
| Calculation factor | Yo | 0.8 |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

• Tolerances:

metric bearings: Normal and CL7C, CLN inch bearings: Normal and CL, deviating width

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

More Information

| Product details | Engineering information | Tools |
|--------------------------------|---|------------------------------|
| Designs and variants | | SimPro Quick |
| General bearing specifications | Principles of rolling bearing selection | Bearing Select |
| Loads | General bearing knowledge | Engineering Calculator |
| Temperature limits | Bearing selection process | LubeSelect for SKF greases |
| Permissible speed | Bearing failure and how to prevent it | Heater Selection Tool |
| Design considerations | | Oil Injection Method Program |
| Bearing designations | | skf.com/mount |
| Designation system | | |



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