

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

# 51307

## Single direction thrust ball bearing

Single direction thrust ball bearings can accommodate axial loads in one direction. They must not be subjected to any radial load. Their separable components facilitate mounting/dismounting and maintenance inspections. Many of the components are interchangeable. The shaft washers have a ground bore that enables an interference fit.

- Separable design facilitates mounting/dismounting and maintenance inspections
- Interchangeable components
- Ground bore of shaft washers enable interference fit

# Overview

## Dimensions

| | |
|---|---|
| Bore diameter | 35 mm |
| Outside diameter | 68 mm |
| Height | 24 mm |

## Performance

| | |
|---|---|
| Basic dynamic load rating | 49.4 kN |
| Basic static load rating | 96.5 kN |
| Reference speed | 3 400 r/min |
| Limiting speed | 4 800 r/min |

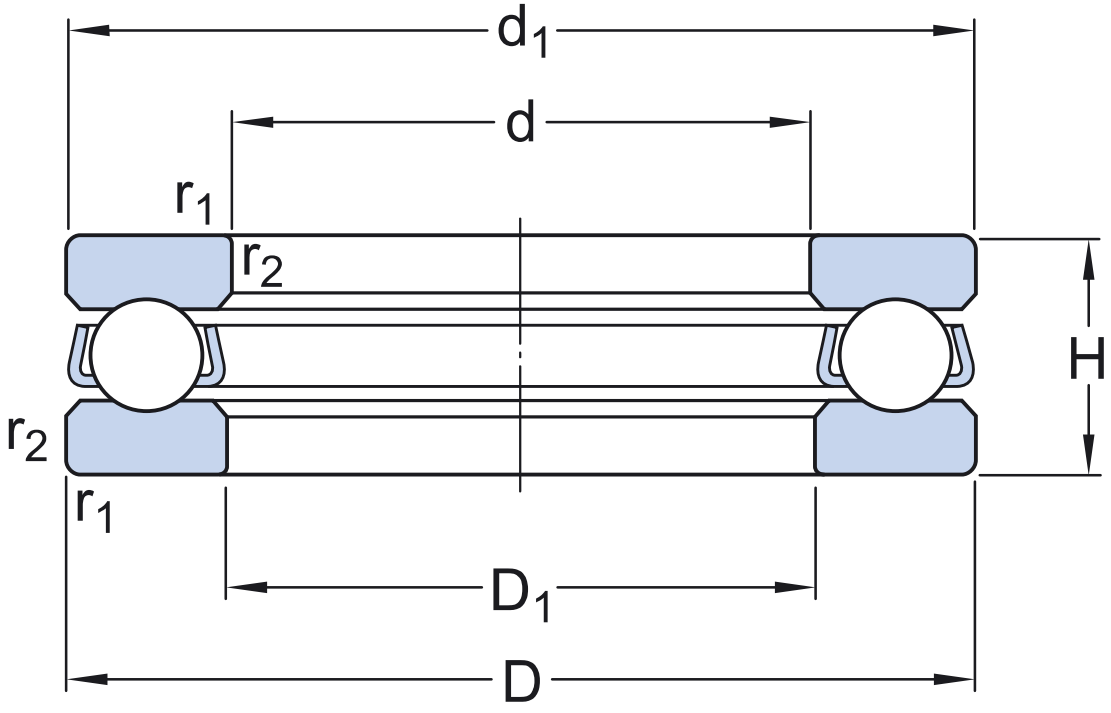
## Properties

| | |
|---|---|
| Axial load capability | Single-direction |
| Number of rows | 1 |
| Cage | Sheet metal |
| Housing washer type | Flat |
| Tolerance class | Normal |
| Material, bearing | Bearing steel |
| Coating | Without |

## Logistics

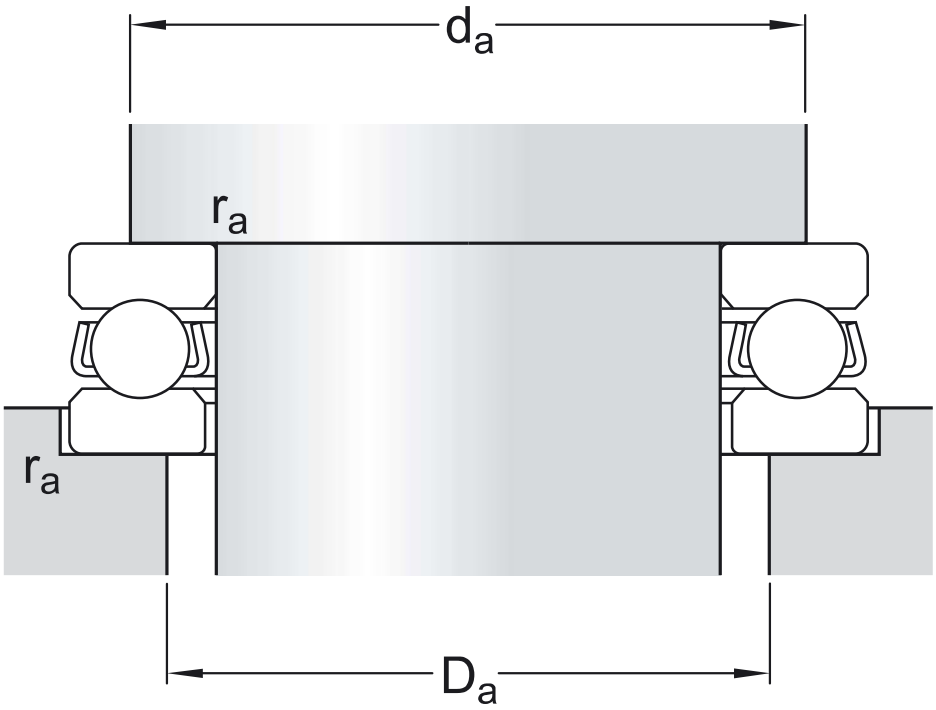
| | |
|---|---|
| Product net weight | 0.364 kg |
| eClass code | 23-05-10-01 |
| UNSPSC code | 31171507 |

## Technical specification




## Dimensions

| | | |
|---|---|---|
| d | 35 mm | Bore diameter |
| D | 68 mm | Outside diameter |
| H | 24 mm | Height |
| $d_1$ | ≈ 68 mm | Outside diameter shaft washer |
| $D_1$ | ≈ 37 mm | Inner diameter housing washer |
| $r_{1,2}$ | min. 1 mm | Chamfer dimension washer |




## Abutment dimensions

| | | |
|---|---|---|
| $d_a$ | min. 55 mm | Abutment diameter shaft |
| $D_a$ | max. 48 mm | Abutment diameter housing |
| $r_a$ | max. 1 mm | Fillet radius |

## Calculation data

| | | |
|---|---|---|
| Basic dynamic load rating | C | 49.4 kN |
| Basic static load rating | $C_0$ | 96.5 kN |
| Fatigue load limit | $P_u$ | 3.55 kN |
| Reference speed | | 3 400 r/min |
| Limiting speed | | 4 800 r/min |
| Minimum load factor | A | 0.048 |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: table 1

## BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

## More Information

### Product details

- Designs and variants
- General bearing specifications
- Loads
- Temperature limits
- Permissible speed
- Mounting
- Designation system

### Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing interfaces
- Seat tolerances for standard conditions
- Lubrication
- External sealing, mounting and dismounting
- Bearing failure and how to prevent it

### Tools

- SKF Product select
- Bearing Frequency Calculator
- SimPro Quick
- LubeSelect for SKF greases
- Heater selection tool

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