

# 51103

## 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	17 mm
Outside diameter	30 mm
Thickness	9 mm

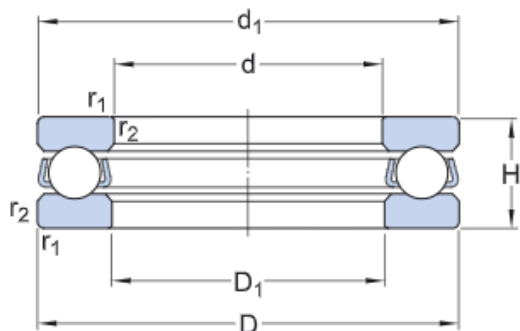
### Performance

Basic dynamic load rating	11.4 kN
Basic static load rating	21.2 kN
Limiting speed	12 000 r/min
Reference speed	8 500 r/min

### Properties

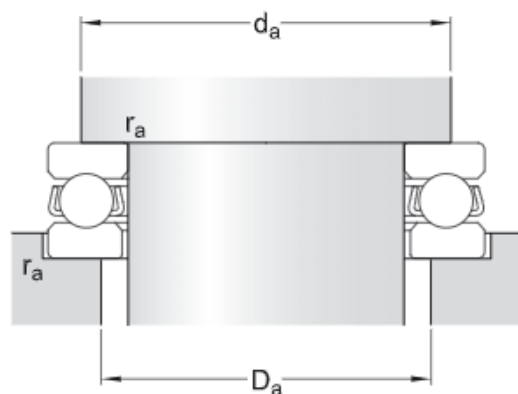
Axial load capability	Single-direction
Cage	Sheet metal
Coating	Without
Housing washer type	Flat
Material, bearing	Bearing steel
Number of rows	1
Tolerance class	Normal

## Technical Specification



### Dimensions

d	17 mm	Bore diameter
D	30 mm	Outside diameter
H	9 mm	Height
$d_1$	≈ 30 mm	Outside diameter shaft washer
$D_1$	≈ 18 mm	Inner diameter housing washer
$r_{1,2}$	min. 0.3 mm	Chamfer dimension washer



### Abutment dimensions

$d_a$	min. 25 mm	Abutment diameter shaft
$D_a$	max. 22 mm	Abutment diameter housing
$r_a$	max. 0.3 mm	Fillet radius

### Calculation data

Basic dynamic load rating	C	11.4 kN
Basic static load rating	$C_0$	21.2 kN
Fatigue load limit	$P_u$	0.78 kN
Reference speed		8 500 r/min
Limiting speed		12 000 r/min
Minimum load factor	A	0.0023

Mass

Mass bearing (including seat washer where applicable)

0.025 kg

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