

# 51100 Single direction thrust ball bearing



## 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	10 mm
Outside diameter	24 mm
Height	9 mm

## Performance

Basic dynamic load rating	8.71 kN
Basic static load rating	12.2 kN
Reference speed	9 500 r/min
Limiting speed	13 000 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

# Technical Specification



## Dimensions

d	10 mm	Bore diameter
D	24 mm	Outside diameter
H	9 mm	Height
$d_1$	≈ 24 mm	Outside diameter shaft washer
$D_1$	≈ 11 mm	Inner diameter housing washer
$r_{1,2}$	min. 0.3 mm	Chamfer dimension washer

## Abutment dimensions

$d_a$	min. 19 mm	Abutment diameter shaft
$D_a$	max. 15 mm	Abutment diameter housing
$r_a$	max. 0.3 mm	Fillet radius



## Calculation data

Basic dynamic load rating	C	8.71 kN
Basic static load rating	$C_0$	12.2 kN
Fatigue load limit	$P_u$	0.45 kN
Reference speed		9 500 r/min
Limiting speed		13 000 r/min
Minimum load factor	A	0.0012

## Mass

Mass bearing (including seat washer where applicable)

0.02 kg

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