



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

## 51410

### 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	50 mm
Outside diameter	110 mm
Height	43 mm

Performance

Basic dynamic load rating	159 kN
Basic static load rating	340 kN
Reference speed	2 000 r/min
Limiting speed	2 800 r/min

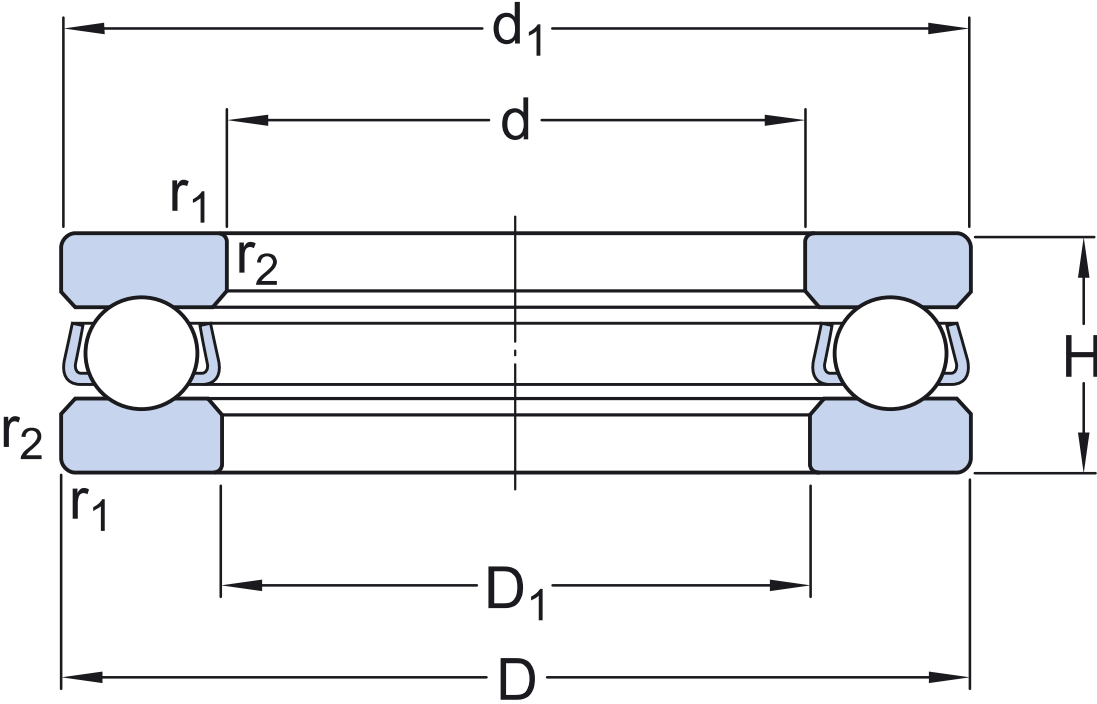
Properties

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

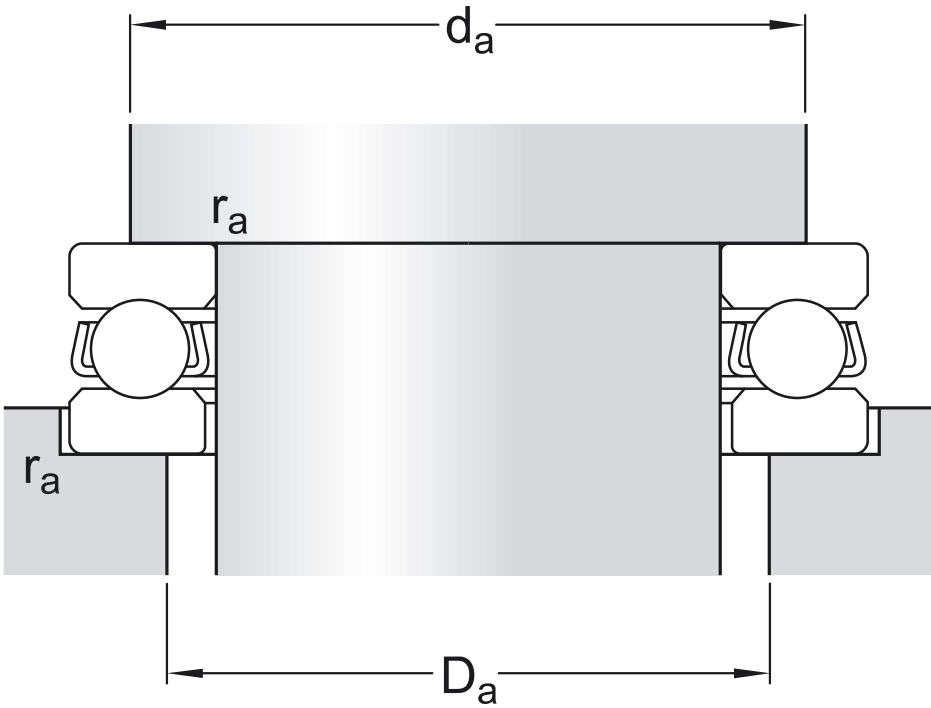
Product net weight	1.99 kg
eClass code	23-05-10-01
UNSPSC code	31171507

Technical specification



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
H	43 mm	Height
$d_1$	$\approx 110$ mm	Outside diameter shaft washer
$D_1$	$\approx 52$ mm	Inner diameter housing washer
$r_{1,2}$	min. 1.5 mm	Chamfer dimension washer



Abutment dimensions

$d_a$	min. 86 mm	Abutment diameter shaft
$D_a$	max. 74 mm	Abutment diameter housing
$r_a$	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	159 kN
Basic static load rating	$C_0$	340 kN
Fatigue load limit	$P_u$	12.5 kN
Reference speed		2 000 r/min
Limiting speed		2 800 r/min
Minimum load factor	A	0.6

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS




- [Tolerances: table 1](#)



## BEARING INTERFACES

- [Seat tolerances for standard conditions](#)
- [Tolerances and resultant fit](#)

More Information

<div> <b>Product details</b></div> <div><div><a href="#">Designs and variants</a></div><div><a href="#">General bearing specifications</a></div><div><a href="#">Loads</a></div><div><a href="#">Temperature limits</a></div><div><a href="#">Permissible speed</a></div><div><a href="#">Mounting</a></div><div><a href="#">Designation system</a></div></div>	<div><div> <b>Engineering information</b></div><div><div><a href="#">Principles of rolling bearing selection</a></div><div><a href="#">General bearing knowledge</a></div><div><a href="#">Bearing selection process</a></div><div><a href="#">Bearing interfaces</a></div><div><a href="#">Seat tolerances for standard conditions</a></div><div><a href="#">Lubrication</a></div><div><a href="#">External sealing, mounting and dismounting</a></div><div><a href="#">Bearing failure and how to prevent it</a></div></div></div>	<div><div> <b>Tools</b></div><div><div><a href="#">SKF Product select</a></div><div><a href="#">Bearing Frequency Calculator</a></div><div><a href="#">SimPro Quick</a></div><div><a href="#">LubeSelect for SKF greases</a></div><div><a href="#">Heater selection tool</a></div></div></div>
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