



54312 Double direction thrust ball bearing with sphered housing washers

Double direction thrust ball bearing with sphered housing washers

Double direction thrust ball bearings with a sphered housing washer can accommodate axial loads in both directions, but they must not be subjected to any radial load. Many of the components are interchangeable. These bearings can be used together with a sphered seat washer adjacent to the housing washer or adjacent to a machine component manufactured with a sphered surface. 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 the shaft washers enable interference fits
- Accommodate initial misalignment
- Used with a sphered seat washer

Overview

Dimensions

Bore diameter	50 mm
Outside diameter	110 mm
Height	70.7 mm
Radius of aligning surface	90 mm

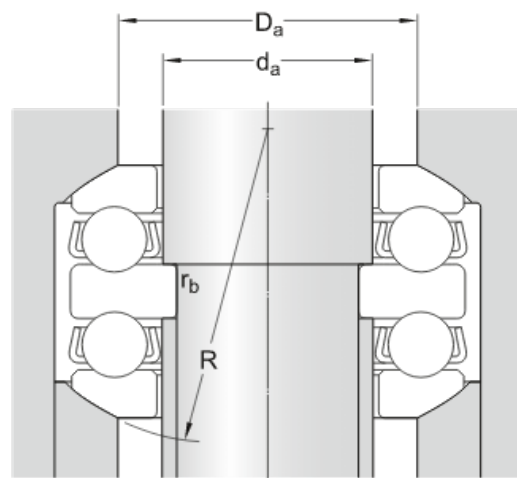
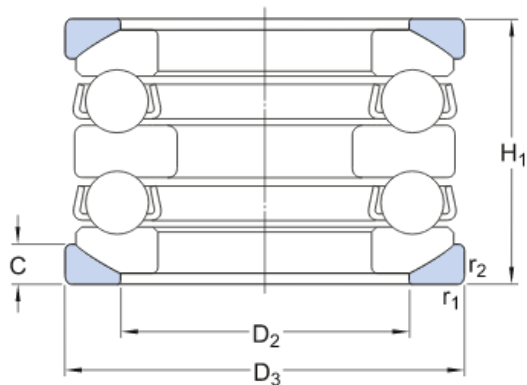
Performance

Basic dynamic load rating	101 kN
Basic static load rating	224 kN
Reference speed	1 500 r/min
Limiting speed	2 200 r/min

Properties

Axial load capability	Double-direction
Number of rows	2
Cage	Sheet metal
Housing washer type	Sphered
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without

Technical Specification

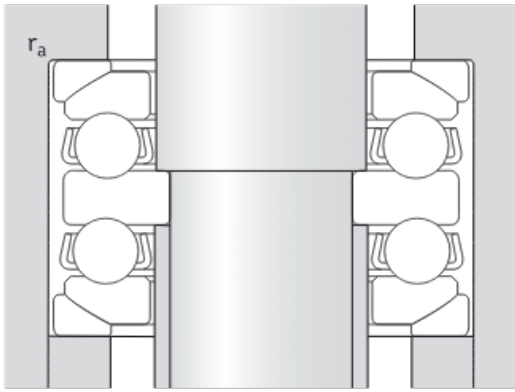


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
H	70.7 mm	Height
H ₁	78 mm	Height bearing including seat washer
D ₁	≈ 62 mm	Inner diameter housing washer
D ₂	85 mm	Inner diameter sphered seat washer
D ₃	115 mm	Outside diameter sphered housing washer
B	15 mm	Height shaft washer
C	11.5 mm	Height sphered housing washer
R	90 mm	Radius sphered housing washer
s	36.5 mm	Centre height housing washer sphere
r _{1,2}	min. 1.1 mm	Chamfer dimension housing washer
r _{3,4}	min. 0.6 mm	Chamfer dimension shaft washer

Abutment dimensions

d _a	60 mm	Abutment diameter shaft
D _a	max. 85 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius housing
r _b	max. 0.6 mm	Fillet radius shaft



Calculation data

Basic dynamic load rating	C	101 kN
Basic static load rating	C ₀	224 kN
Fatigue load limit	P _u	8.3 kN
Reference speed		1 500 r/min
Limiting speed		2 200 r/min
Minimum load factor	A	0.26

Mass

Mass bearing (including seat washer where applicable)	2.9 kg
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Associated products

Seat washer	U 312
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