

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

## 29412 E

### Spherical roller thrust bearing with stamped steel cage

Spherical roller thrust bearings accommodate very heavy axial and considerable radial loads. They have the highest load rating of all thrust bearings, enabling compact, high power density bearing arrangements. By combining two or more spherical roller thrust bearings, it is possible to create a bearing arrangement that is either self-aligning, allowing misalignment of the shaft, or very stiff.

- High load carrying capacity
- Can accommodate combined loads
- Allow misalignment or create very stiff bearing arrangements
- Long service life and low friction
- Separable design

# Overview

## Dimensions

Bore diameter	2.362 in
Outside diameter	5.118 in
Height	1.654 in

## Performance

Basic dynamic load rating	87 675 lbf
Basic static load rating	205 700 lbf
Reference speed	2 800 r/min
Limiting speed	5 000 r/min
SKF performance class	SKF Explorer

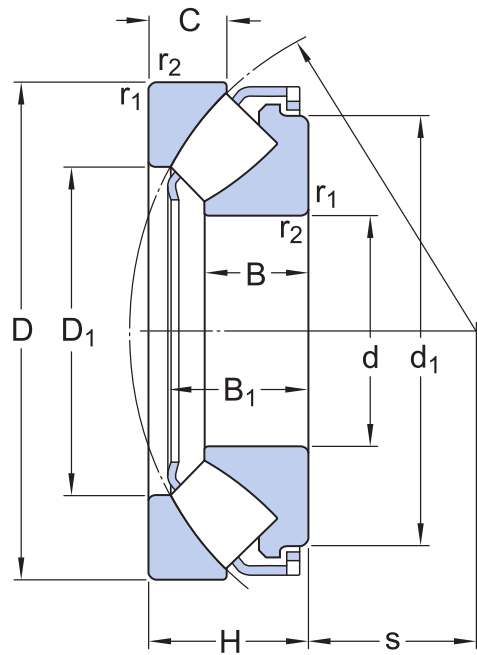
## Properties

Locating feature, housing washer	None
Bore type	Cylindrical
Cage	Sheet metal
Tolerance class	Normal

## Logistics

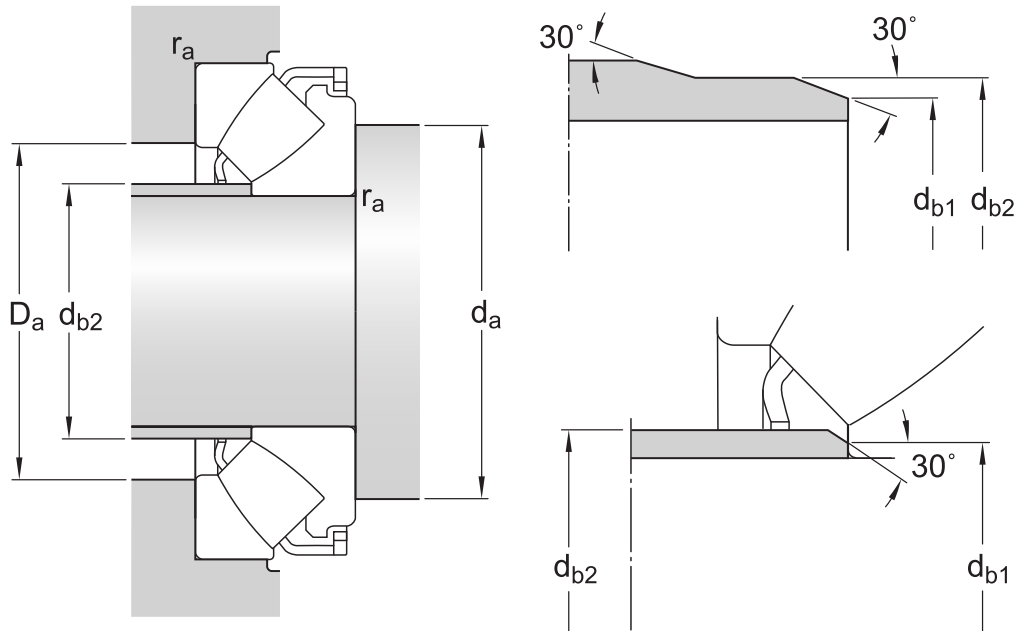
Product net weight	5.664 lb
eClass code	23-05-11-03
UNSPSC code	31171507

## Technical specification



## Dimensions

d	2.362 in	Bore diameter
D	5.118 in	Outside diameter
H	1.654 in	Height
d <sub>1</sub>	≈ 4.409 in	Outside diameter of shaft washer end side face
D <sub>1</sub>	≈ 3.366 in	Shoulder diameter outer ring
B	1.063 in	Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage)
B <sub>1</sub>	1.445 in	Height shaft washer + cage
C	0.827 in	Height housing washer
s	1.496 in	Distance from shaft washer end side face to pressure point
r <sub>1,2</sub>	min. 0.059 in	Chamfer dimension shaft washer



## Abutment dimensions

$d_a$	min. 3.543 in	Diameter of shaft abutment
$d_{b1}$	max. 2.638 in	Abutment diameter of spacer ring
$d_{b2}$	max. 2.638 in	Outside diameter of spacer ring
$D_a$	max. 4.213 in	Diameter of housing abutment
$r_a$	max. 0.059 in	Fillet radius

## Calculation data

Basic dynamic load rating	C	87 675 lbf
Basic static load rating	$C_0$	205 700 lbf
Fatigue load limit	$P_u$	25 628 lbf
Reference speed		2 800 r/min
Limiting speed		5 000 r/min
Minimum axial load factor	A	0.08

## More Information

### Product details

[Designs and variants](#)

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[General bearing specifications](#)

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[Loads](#)

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[Temperature limits](#)

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[Permissible speed](#)

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[Design considerations](#)

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[Lubrication](#)

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[Mounting](#)

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[Designation system](#)

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### Engineering information

[Principles of rolling bearing selection](#)

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[General bearing knowledge](#)

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[Bearing selection process](#)

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[Bearing failure and how to prevent it](#)

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### Tools

[SimPro Quick](#)

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[SKF Product select](#)

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[Bearing Frequency Calculator](#)

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[LubeSelect for SKF greases](#)

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[Heater selection tool](#)

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