



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

29422 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	4.331 in
Outside diameter	9.055 in
Height	2.874 in

Performance

Basic dynamic load rating	265 275 lbf
Basic static load rating	674 427 lbf
Reference speed	1 600 r/min
Limiting speed	2 800 r/min
SKF performance class	SKF Explorer

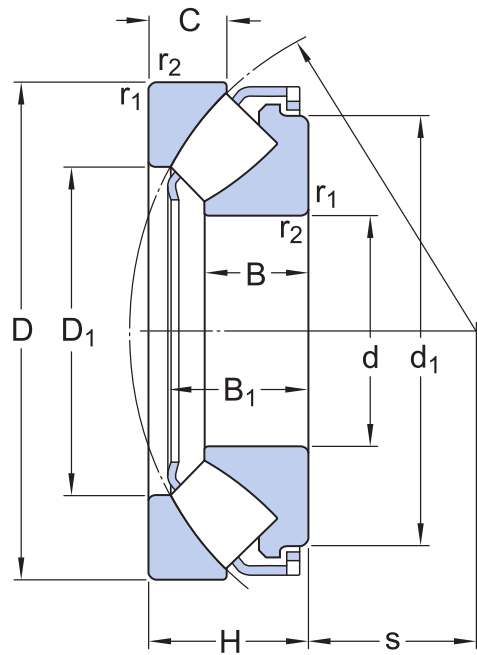
Properties

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

Logistics

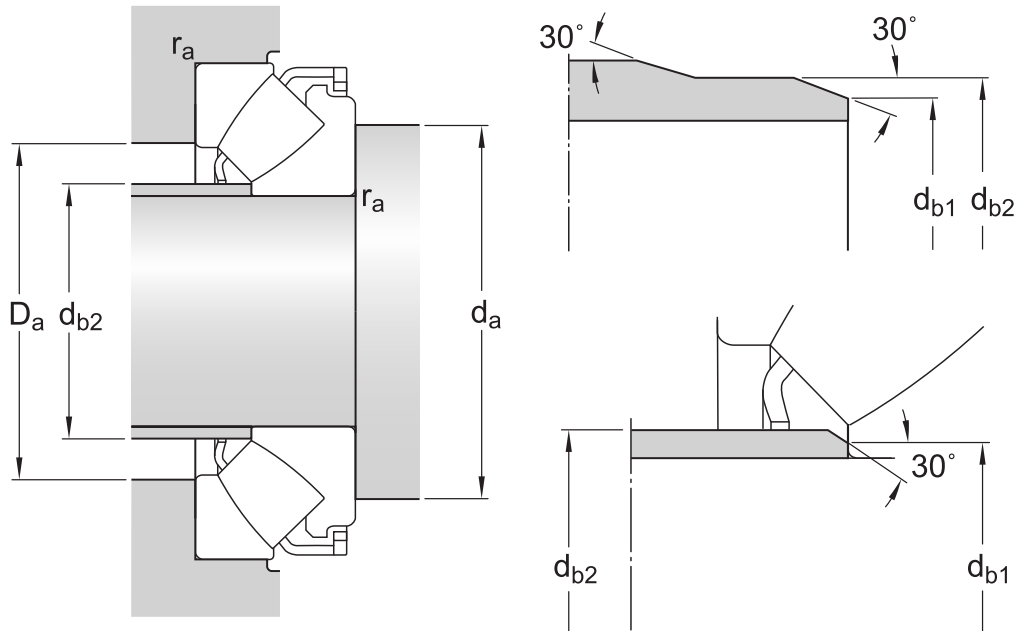
Product net weight	29.321 lb
eClass code	23-05-11-03
UNSPSC code	31171507

Technical specification



Dimensions

d	4.331 in	Bore diameter
D	9.055 in	Outside diameter
H	2.874 in	Height
d ₁	≈ 7.835 in	Outside diameter of shaft washer end side face
D ₁	≈ 6.142 in	Shoulder diameter outer ring
B	1.85 in	Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage)
B ₁	2.547 in	Height shaft washer + cage
C	1.366 in	Height housing washer
s	2.717 in	Distance from shaft washer end side face to pressure point
r _{1,2}	min. 0.118 in	Chamfer dimension shaft washer



Abutment dimensions

d_a	min. 6.496 in	Diameter of shaft abutment
d_{b1}	max. 4.744 in	Abutment diameter of spacer ring
d_{b2}	max. 5.079 in	Outside diameter of spacer ring
D_a	max. 7.598 in	Diameter of housing abutment
r_a	max. 0.098 in	Fillet radius

Calculation data

Basic dynamic load rating	C	265 275 lbf
Basic static load rating	C_0	674 427 lbf
Fatigue load limit	P_u	73 063 lbf
Reference speed		1 600 r/min
Limiting speed		2 800 r/min
Minimum axial load factor	A	0.86

More Information

Product details

[Designs and variants](#)

[General bearing specifications](#)

[Loads](#)

[Temperature limits](#)

[Permissible speed](#)

[Design considerations](#)

[Lubrication](#)

[Mounting](#)

[Designation system](#)

Engineering information

[Principles of rolling bearing selection](#)

[General bearing knowledge](#)

[Bearing selection process](#)

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

Tools

[SimPro Quick](#)

[SKF Product select](#)

[Bearing Frequency Calculator](#)

[LubeSelect for SKF greases](#)

[Heater selection tool](#)

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