



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

29420 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	3.937 in
Outside diameter	8.2677 in
Height	2.6378 in

Performance

Basic dynamic load rating	220 313 lbf
Basic static load rating	562 022 lbf
Reference speed	1 700 r/min
Limiting speed	3 000 r/min
SKF performance class	SKF Explorer

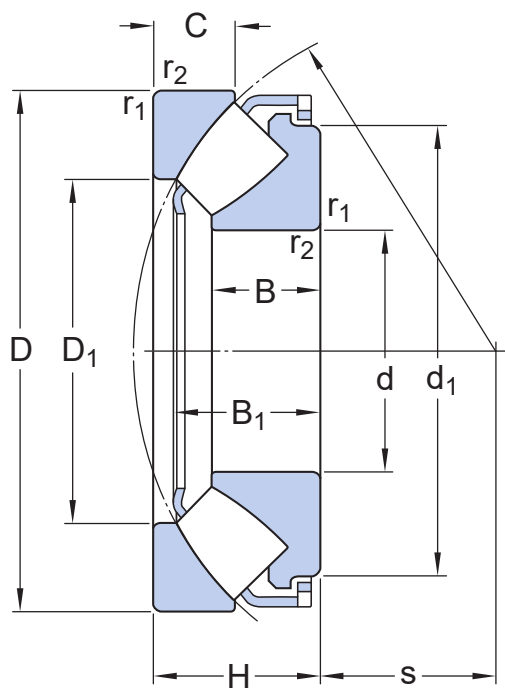
Properties

Locating feature, housing washer	None
Bore type	Cylindrical
Cage	Sheet metal
Tolerance class	Normal
Indicative product carbon footprint to manufacture	80.271 lb CO ₂ e

Logistics

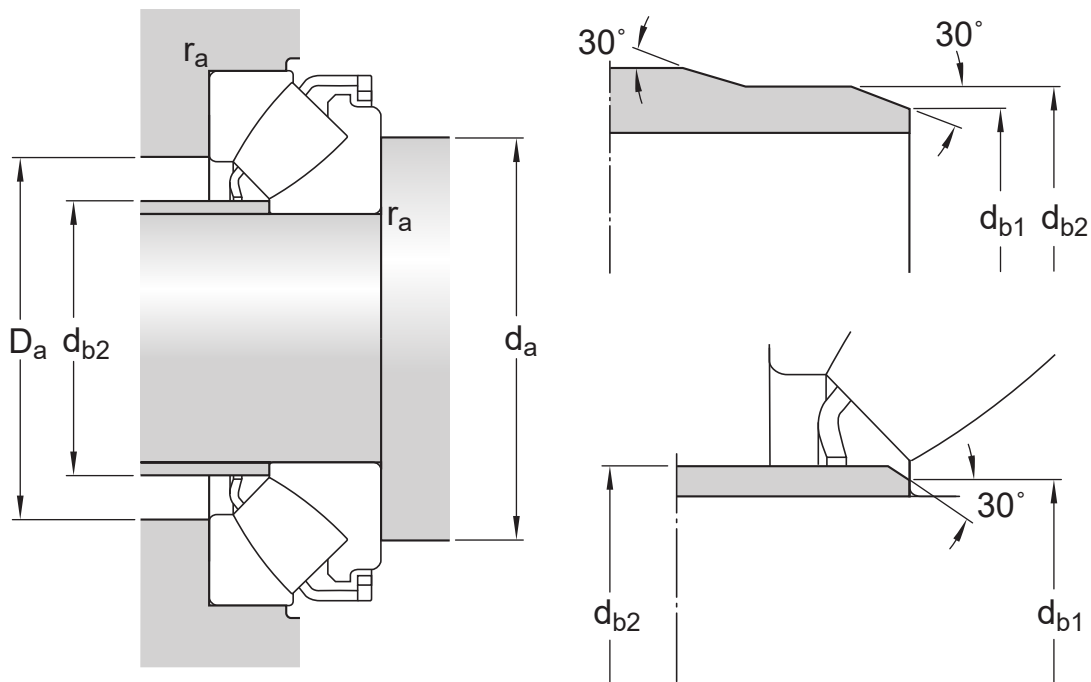
Product net weight	22.298 lb
eClass code	23-05-11-03
UNSPSC code	31171507

Technical specification



Dimensions

d	3.937 in	Bore diameter
D	8.2677 in	Outside diameter
H	2.6378 in	Height
d ₁	≈ 7.1654 in	Outside diameter of shaft washer end side face
D ₁	≈ 5.5906 in	Shoulder diameter outer ring
B	1.6929 in	Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage)
B ₁	2.2559 in	Height shaft washer + cage
C	1.2598 in	Height housing washer
s	2.4409 in	Distance from shaft washer end side face to pressure point
r _{1,2}	min. 0.1181 in	Chamfer dimension shaft washer



Abutment dimensions

d_a	min. 5.9055 in	Diameter of shaft abutment
d_{b1}	max. 4.3307 in	Abutment diameter of spacer ring
d_{b2}	max. 4.3307 in	Outside diameter of spacer ring
D_a	max. 6.8898 in	Diameter of housing abutment
r_a	max. 0.0984 in	Fillet radius

Calculation data

Basic dynamic load rating	C	220 313 lbf
Basic static load rating	C_0	562 022 lbf
Fatigue load limit	P_u	61 822 lbf
Reference speed		1 700 r/min
Limiting speed		3 000 r/min
Minimum axial load factor	A	0.59

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- [Tolerances: table](#)

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

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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