



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

1308 ETN9

Self-aligning ball bearing

Self-aligning ball bearings have two rows of balls, a common sphered raceway in the outer ring and two deep uninterrupted raceway grooves in the inner ring. They are insensitive to angular misalignment of the shaft relative to the housing, which can be caused, for example, by shaft deflection.

- Accommodate static and dynamic misalignment
- Excellent high-speed performance
- Excellent light load performance
- Low friction

Overview

Dimensions

Bore diameter	1.575 in
Outside diameter	3.543 in
Width	0.906 in

Performance

Basic dynamic load rating	7 599 lbf
Basic static load rating	2 518 lbf
Reference speed	14 000 r/min
Limiting speed	9 500 r/min

Properties

Retaining feature, inner ring	None
Locating feature, bearing outer ring	None
Number of rows	2
Bore type	Cylindrical
Cage	Non-metallic
Radial internal clearance	CN
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without in

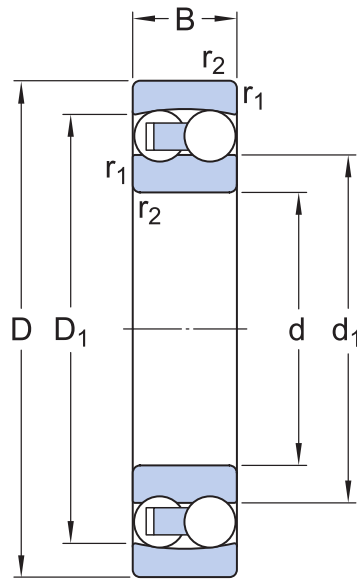
Logistics

Product net weight	1.499 lb
eClass code	23-05-08-06
UNSPSC code	31171532

Technical specification

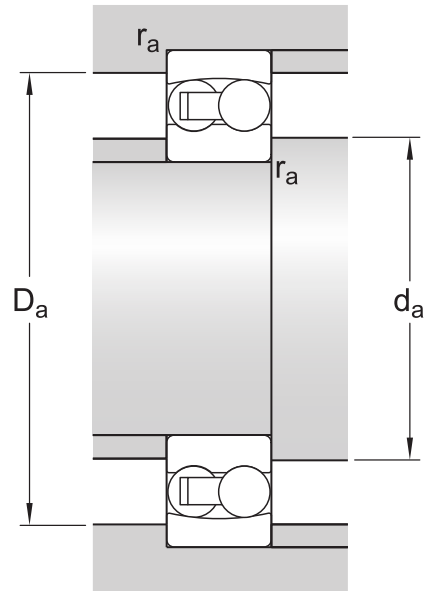
Bore type

Cylindrical



Dimensions

d	1.575 in	Bore diameter
D	3.543 in	Outside diameter
B	0.906 in	Width
d_1	≈ 2.42 in	Shoulder diameter inner ring
D_1	≈ 3.157 in	Shoulder diameter outer ring
$r_{1,2}$	min. 0.043 in	Chamfer dimension



Abutment dimensions

d_a	min. 1.929 in	Abutment diameter shaft
D_a	max. 3.189 in	Abutment diameter housing
r_a	max. 0.043 in	Fillet radius

Calculation data

Basic dynamic load rating	C	7 599 lbf
Basic static load rating	C_0	2 518 lbf
Fatigue load limit	P_u	128 lbf
Reference speed		14 000 r/min
Limiting speed		9 500 r/min
Permissible angular misalignment	α	3 °
Calculation factor	k_f	0.04
Limiting value	e	0.23
Calculation factor	Y_0	2.8
Calculation factor	Y_1	2.7
Calculation factor	Y_2	4.2

More Information

Product details

[Designs and variants](#)

[General bearing specifications](#)

[Loads](#)

[Temperature limits](#)

[Permissible speed](#)

[Design considerations](#)

[Mounting](#)

[Designation system](#)

Engineering information

[Principles of rolling bearing selection](#)

[General bearing knowledge](#)

[Bearing selection process](#)

[Bearing interfaces](#)

[Seat tolerances for standard conditions](#)

[Selecting internal clearance](#)

[Lubrication](#)

[Sealing, mounting and dismounting](#)

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

Tools

[SKF Product select](#)

[SimPro Quick](#)

[Bearing Frequency Calculator](#)

[LubeSelect for SKF greases](#)

[Heater selection tool](#)

[Drive-up Method Program](#)

[Oil Injection Method Program](#)

[Tool and Accessory Selector for sleeves and shafts](#)

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