



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



2208 E-2RS1TN9

Self-aligning ball bearing with seals on both sides

Self-aligning ball bearings, with seals on both sides, 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. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out.

- Accommodate static and dynamic misalignment
- Excellent high-speed performance
- Excellent light load performance
- Low friction
- Integral sealing results in reduced maintenance requirements and prolonged bearing service life

Overview

Dimensions

Bore diameter	1.575 in
Outside diameter	3.15 in
Width	0.906 in

Performance

Basic dynamic load rating	4 474 lbf
Basic static load rating	1 562 lbf
Reference speed	16 000 r/min
Limiting speed	5 600 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	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	Without in

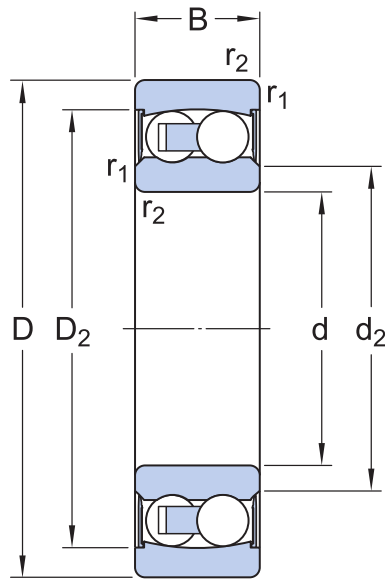
Logistics

Product net weight	1.111 lb
eClass code	23-05-08-06
UNSPSC code	31171532

Technical specification

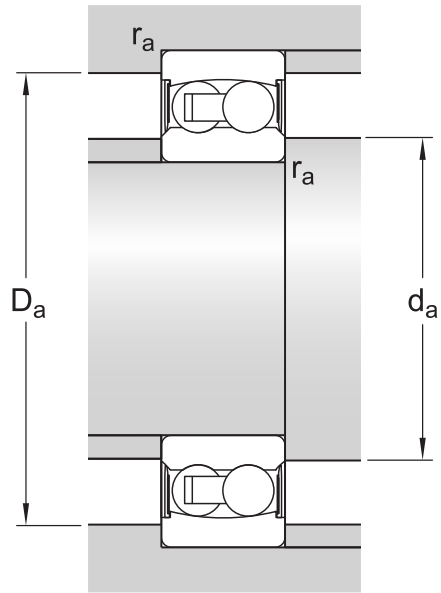
Bore type

Cylindrical



Dimensions

d	1.575 in	Bore diameter
D	3.15 in	Outside diameter
B	0.906 in	Width
d_2	≈ 1.929 in	Recess diameter inner ring
D_2	≈ 2.748 in	Recess diameter outer ring
$r_{1,2}$	min. 0.043 in	Chamfer dimension



Abutment dimensions

d_a	min. 1.85 in	Abutment diameter shaft
d_a	max. 1.929 in	Abutment diameter shaft
D_a	max. 2.874 in	Abutment diameter housing
r_a	max. 0.043 in	Fillet radius

Calculation data

Basic dynamic load rating	C	4 474 lbf
Basic static load rating	C_0	1 562 lbf
Fatigue load limit	P_u	80 lbf
Reference speed		16 000 r/min
Limiting speed		5 600 r/min
Permissible angular misalignment	α	1.5 °
Calculation factor	k_r	0.045
Limiting value	e	0.22
Calculation factor	Y_0	2.8
Calculation factor	Y_1	2.9
Calculation factor	Y_2	4.5

Tolerances and clearances




GENERAL BEARING SPECIFICATIONS

- [Tolerances](#): Normal, JS7
- [Radial internal clearance](#): table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits

More Information

 Product details	 Engineering information	 Tools
Designs and variants	Principles of rolling bearing selection	SKF Product select - Select and evaluate bearing
General bearing specifications	General bearing knowledge	SKF Product select - Combine housing with bearing
Loads	Bearing selection process	SimPro Quick
Temperature limits	Bearing interfaces	LubeSelect for SKF greases
Permissible speed	Seat tolerances for standard conditions	Heater selection tool
Design considerations	Selecting internal clearance	Drive-up Method Program
Mounting	Lubrication	Oil Injection Method Program
Designation system	Sealing, mounting and dismounting	Tool and Accessory Selector for sleeves and shafts
	Bearing failure and how to prevent it	

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