

2209 E-2RS1KTN9



Self-aligning ball bearing with tapered bore and seals on both sides

Self-aligning ball bearings, with a tapered bore and 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 tapered bore facilitates ease of mounting via adapter/withdrawal sleeves. The integral sealing can prolong bearing service life by keeping lubricant in the bearings and contaminants out.

- Ease of mounting via adapter/withdrawal sleeves
- Accommodate static and dynamic misalignment
- Excellent high-speed and light load performance
- Low friction
- Integral sealing results in reduced maintenance requirements and prolonged bearing service life

Dimensions

Bore diameter	1.772 in
Outside diameter	3.346 in
Width	0.906 in

Properties

Overview

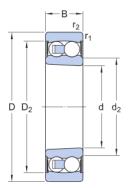
Bore type	Tapered 1:12
Cage	Non-metallic
Coating	Without
Locating feature, bearing outer ring	None
Lubricant	Grease
Material, bearing	Bearing steel
Radial internal clearance	CN
Relubrication feature	Without
Retaining feature, inner ring	None
Sealing	Seal on both sides
Sealing type	Contact
Tolerance class	Normal



Tapered 1:12

Technical Specification

Bore type



Dimensions

d	1.772 in	Bore diameter
D	3.346 in	Outside diameter
В	0.906 in	Width
d ₂	≈ 2.083 in	Recess diameter inner ring
D_2	≈ 2.963 in	Recess diameter outer ring
r _{1,2}	min. 0.043 in	Chamfer dimension

Abutment dimensions

D _a max. 3.071 in	Abutment diameter housing
r _a max. 0.043 in	Fillet radius

Calculation data

Basic dynamic load rating	С	5148 lbf
Basic static load rating	C ₀	1 754 lbf
Fatigue load limit	Pu	90 lbf
Limiting speed		5 300 r/min



Permissible angular misalignment	α	1.5 °
Calculation factor	k _r	0.045
Limiting value	e	0.21
Calculation factor	Y ₀	3.2
Calculation factor	Y ₁	3
Calculation factor	Y ₂	4.6

Mass

Mass bearing	1.168 lb
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