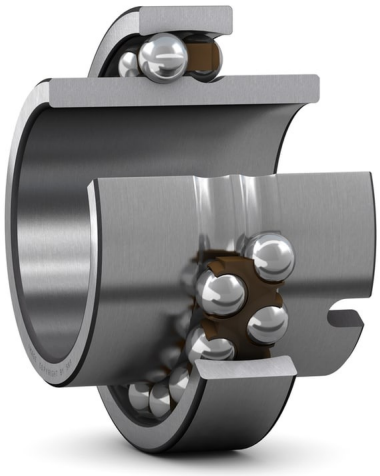


11210 TN9Self-aligning ball bearing with extended inner ring

Self-aligning ball bearing with extended inner ring

Self-aligning ball bearings, with extended inner ring, 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 extended inner ring enables use of commercial grade shafting and axially location on the shaft by means of a slot at one end of the inner ring.

- Accommodate static and dynamic misalignment
- Excellent high-speed performance
- Excellent light load performance
- Low friction
- Extended inner ring facilitates ease of mounting

Overview

Dimensions

Bore diameter	50 mm
Outside diameter	90 mm
Width	58 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	9.15 kN
Reference speed	11 000 r/min
Limiting speed	4 300 r/min

Properties

Retaining feature, inner ring	Locating slot
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	With

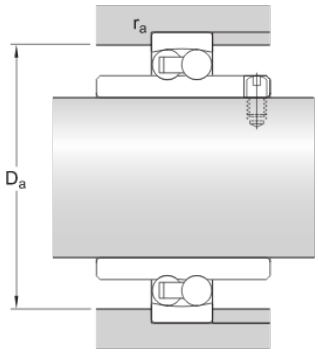
Technical Specification

Bore type	Cylindrical

NOT FOUND

Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	58 mm	Width
C	20 mm	Width outer ring
d_1	≈ 61.7 mm	Shoulder diameter inner ring
D_1	≈ 78.1 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 1.1 mm	Chamfer dimension



Abutment dimensions

D_a	max. 83 mm	Abutment diameter housing
r_a	max. 1.1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	9.15 kN
Fatigue load limit	P_u	0.475 kN
Limiting speed		4 300 r/min

Permissible angular misalignment	α	2.5 °
Calculation factor	k_r	0.04
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	0.85 kg

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