



SKF 11209 TN9

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.

Technical specifications

Bore type	Cylindrical
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Dimensions	
Bore diameter	45 mm
Outside diameter	85 mm
Width	58 mm
Width outer ring	19 mm
Shoulder diameter inner ring	57.7 mm
Shoulder diameter outer ring	72.5 mm
Chamfer dimension	1.1 mm

Abutment dimensions	
Abutment diameter housing	78 mm
Fillet radius	1.1 mm

Calculation data	
Basic dynamic load rating	22.9 kN
Basic static load rating	7.8 kN
Fatigue load limit	0.4 kN
Limiting speed	4500 r/min
Permissible angular misalignment	2.5 °
Calculation factor	0.04
Limiting value	0.21
Calculation factor	3.2
Calculation factor	3
Calculation factor	4.6

Performance	
Basic dynamic load rating	22.9 kN
Basic static load rating	7.8 kN
Reference speed	12000 r/min
Limiting speed	4500 r/min

Properties	
Retaining feature, inner ring	Locating slot
Locating feature, bearing outer ring	Without
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
Indicative carbon footprint for new product	2.8 kg CO ₂ e

Logistics	
Product net weight	0.77 kg
eClass code	23-05-08-06
UNSPSC code	31171532

SKF drawings