



SKF 2209 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.

Technical specifications

Bore type	Cylindrical
Dimensions	
Bore diameter	45 mm
Outside diameter	85 mm
Width	23 mm
Recess diameter inner ring	52.9 mm
Recess diameter outer ring	75.25 mm
Chamfer dimension	1.1 mm
Abutment dimensions	
Abutment diameter shaft	52 mm
Abutment diameter shaft	53 mm
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
Reference speed	15000 r/min
Limiting speed	5300 r/min
Permissible angular misalignment	1.5 °
Calculation factor	0.05
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	15000 r/min
Limiting speed	5300 r/min
Properties	
Retaining feature, inner ring	None
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	Seal on both sides
Sealing type	Contact

Lubricant	Grease
Relubrication feature	Without
Indicative carbon footprint for new product	2 kg CO ₂ e

Logistics	
Product net weight	0.541 kg
eClass code	23-05-08-06
UNSPSC code	31171532

SKF drawings