



SKF 1307 ETN9

Self-aligning ball bearing

Self-aligning ball bearings 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, which can be caused, for example, by shaft deflection.

Technical specifications

Bore type	Cylindrical
Dimensions	
Bore diameter	35 mm
Outside diameter	80 mm
Width	21 mm
Shoulder diameter inner ring	51.55 mm
Shoulder diameter outer ring	68.953 mm
Chamfer dimension	1.5 mm
Abutment dimensions	
Abutment diameter shaft	44 mm
Abutment diameter housing	71 mm
Fillet radius	1.5 mm
Calculation data	
Basic dynamic load rating	26.5 kN
Basic static load rating	8.5 kN
Fatigue load limit	0.43 kN
Reference speed	16000 r/min
Limiting speed	11000 r/min
Permissible angular misalignment	3 °
Calculation factor	0.04
Limiting value	0.25
Calculation factor	2.5
Calculation factor	2.5
Calculation factor	3.9
Performance	
Basic dynamic load rating	26.5 kN
Basic static load rating	8.5 kN
Reference speed	16000 r/min
Limiting speed	11000 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	Without
Lubricant	None
Relubrication feature	Without

Indicative carbon footprint for new product

1.8 kg CO₂e

Logistics

Product net weight

0.497 kg

eClass code

23-05-08-06

UNSPSC code

31171532

SKF drawings