



SKF 2304 TN9

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	20 mm
Outside diameter	52 mm
Width	21 mm
Shoulder diameter inner ring	29.15 mm
Shoulder diameter outer ring	41.9 mm
Chamfer dimension	1.1 mm
Abutment dimensions	
Abutment diameter shaft	27 mm
Abutment diameter housing	45 mm
Fillet radius	1.1 mm
Calculation data	
Basic dynamic load rating	18.2 kN
Basic static load rating	4.75 kN
Fatigue load limit	0.24 kN
Reference speed	26000 r/min
Limiting speed	19000 r/min
Permissible angular misalignment	3 °
Calculation factor	0.05
Limiting value	0.52
Calculation factor	1.3
Calculation factor	1.2
Calculation factor	1.9
Performance	
Basic dynamic load rating	18.2 kN
Basic static load rating	4.75 kN
Reference speed	26000 r/min
Limiting speed	19000 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

0.79 kg CO₂e

Logistics	
Product net weight	0.22 kg
eClass code	23-05-08-06
UNSPSC code	31171532

SKF drawings