



SKF 2311 K

Self-aligning ball bearing with tapered bore

Self-aligning ball bearings, with a tapered bore, 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. The tapered bore facilitates ease of mounting via adapter sleeves or withdrawal sleeves.

Technical specifications

Bore type	Tapered 1:12
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Dimensions	
Bore diameter	55 mm
Outside diameter	120 mm
Width	43 mm
Shoulder diameter inner ring	72 mm
Shoulder diameter outer ring	101 mm
Chamfer dimension	2 mm

Abutment dimensions	
Abutment diameter housing	109 mm
Fillet radius	2 mm

Calculation data	
Basic dynamic load rating	76.1 kN
Basic static load rating	24 kN
Fatigue load limit	1.25 kN
Reference speed	11000 r/min
Limiting speed	7500 r/min
Permissible angular misalignment	3 °
Calculation factor	0.05
Limiting value	0.4
Calculation factor	1.6
Calculation factor	1.6
Calculation factor	2.4

Performance	
Basic dynamic load rating	76.1 kN
Basic static load rating	24 kN
Reference speed	11000 r/min
Limiting speed	7500 r/min

Properties	
Retaining feature, inner ring	None
Locating feature, bearing outer ring	Without
Number of rows	2
Bore type	Tapered 1:12
Cage	Sheet metal
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	7.3 kg CO ₂

Logistics	
Product net weight	2.04 kg
eClass code	23-05-08-06
UNSPSC code	31171532

SKF drawings