



SKF 3303 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

Technical specifications

Dimensions	
Bore diameter	17 mm
Outside diameter	47 mm
Width	22.2 mm
Recess diameter inner ring shoulder	25.7 mm
Recess diameter outer ring shoulder	40.15 mm
Chamfer dimension inner ring	1 mm
Distance pressure point(s)	28 mm
Contact angle	30 °

Abutment dimensions	
Abutment diameter shaft	22.6 mm
Abutment diameter housing	41.4 mm
Fillet radius	1 mm

Calculation data	
Basic dynamic load rating	21.6 kN
Basic static load rating	12.7 kN
Fatigue load limit	0.54 kN
Reference speed	17000 r/min
Limiting speed	14000 r/min
Calculation factor	0.07
Limiting value	0.8
Calculation factor	0.63
Calculation factor	0.66
Calculation factor	0.78
Calculation factor	1.2

Performance	
Basic dynamic load rating	21.6 kN
Basic static load rating	12.7 kN
Reference speed	17000 r/min
Limiting speed	14000 r/min

Properties	
Contact type	Normal contact (two-point contact)
Number of rows	2
Locating feature, bearing outer ring	Without
Ring type	One-piece inner and outer rings
Cage	Non-metallic
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Matched arrangement	No
Universal matching bearing	No
Axial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None

Relubrication feature	Without
Indicative carbon footprint for new product	0.63 kg CO ₂ e

Logistics	
Product net weight	0.176 kg
eClass code	23-05-08-03
UNSPSC code	31171531

SKF drawings