



SKF 3209 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	45 mm
Outside diameter	85 mm
Width	30.2 mm
Recess diameter inner ring shoulder	52.8 mm
Recess diameter outer ring shoulder	77.1 mm
Chamfer dimension inner ring	1.1 mm
Distance pressure point(s)	49 mm
Contact angle	30 °

Abutment dimensions	
Abutment diameter shaft	52 mm
Abutment diameter housing	78 mm
Fillet radius	1 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Fatigue load limit	1.76 kN
Reference speed	7500 r/min
Limiting speed	7500 r/min
Calculation factor	0.06
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	52 kN
Basic static load rating	41.5 kN
Reference speed	7500 r/min
Limiting speed	7500 r/min
SKF performance class	SKF Explorer

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	2.2 kg CO ₂ e

Logistics	
Product net weight	0.62 kg
eClass code	23-05-08-03
UNSPSC code	31171531

SKF drawings