



SKF 3219 A

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	95 mm
Outside diameter	170 mm
Width	55.6 mm
Shoulder diameter inner ring	119.9 mm
Shoulder diameter outer ring	146 mm
Chamfer dimension inner ring	2.1 mm
Distance pressure point(s)	101 mm
Contact angle	30 °

Abutment dimensions	
Abutment diameter shaft	107 mm
Abutment diameter housing	158 mm
Fillet radius	2 mm

Calculation data	
Basic dynamic load rating	159 kN
Basic static load rating	146 kN
Fatigue load limit	5.4 kN
Reference speed	4000 r/min
Limiting speed	3400 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	159 kN
Basic static load rating	146 kN
Reference speed	4000 r/min
Limiting speed	3400 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	Sheet metal
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	16.8 kg CO ₂ e

Logistics	
Product net weight	4.67 kg
eClass code	23-05-08-03
UNSPSC code	31171531

SKF drawings