



SKF 3311 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	55 mm
Outside diameter	120 mm
Width	49.2 mm
Recess diameter inner ring shoulder	68.4 mm
Recess diameter outer ring shoulder	109.4 mm
Chamfer dimension inner ring	2 mm
Distance pressure point(s)	73 mm
Contact angle	30 °

Abutment dimensions	
Abutment diameter shaft	66 mm
Abutment diameter housing	109 mm
Fillet radius	2 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	112 kN
Basic static load rating	81.5 kN
Fatigue load limit	3.45 kN
Reference speed	6000 r/min
Limiting speed	5300 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	112 kN
Basic static load rating	81.5 kN
Reference speed	6000 r/min
Limiting speed	5300 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	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	8.1 kg CO ₂ e

Logistics	
Product net weight	2.26 kg
eClass code	23-05-08-03
UNSPSC code	31171531

SKF drawings

