



SKF N 311 ECP

Single row cylindrical roller bearing, N design

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the inner ring and no flanges on the outer ring, N design bearings can accommodate axial displacement in both directions. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.

Technical specifications

Dimensions	
Bore diameter	55 mm
Outside diameter	120 mm
Width	29 mm
Shoulder diameter of inner ring	77.5 mm
Raceway diameter of outer ring	106.5 mm
Chamfer dimension	2 mm
Chamfer dimension	2 mm
Permissible axial displacement	2 mm

Abutment dimensions	
Diameter of spacer sleeve	65 mm
Diameter of spacer sleeve	104 mm
Diameter of housing abutment	109 mm
Diameter of housing abutment	111 mm
Radius of fillet	2 mm
Radius of fillet	2 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	156 kN
Basic static load rating	143 kN
Fatigue load limit	18.6 kN
Reference speed	6000 r/min
Limiting speed	7000 r/min
Minimum load factor	0.12
Limiting value	0.2
Calculation factor	0.6

Performance	
Basic dynamic load rating	156 kN
Basic static load rating	143 kN
Reference speed	6000 r/min
Limiting speed	7000 r/min
SKF performance class	SKF Explorer

Properties	
Bearing part	Complete bearing
Axial displacement capability	In both directions
Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Non-metallic
Number of flanges, outer ring	0
Number of flanges, inner ring	2
Loose flange	None
Radial internal clearance	CN
Tolerance class	Normal

Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	5.3 kg CO ₂ e

Logistics	
Product net weight	1.46 kg
eClass code	23-05-09-01
UNSPSC code	31171505

SKF drawings