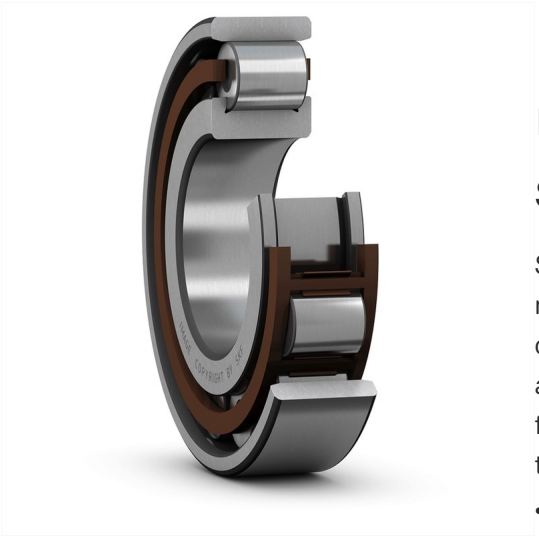


N 311 ECPSingle row cylindrical roller bearing, N design

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.

- High radial load carrying capacity
- Low friction
- Long service life
- Accommodate axial displacement in both directions
- Separable design

Overview

Dimensions

Bore diameter	55 mm
Outside diameter	120 mm
Width	29 mm

Performance

Basic dynamic load rating	156 kN
Basic static load rating	143 kN
Reference speed	6 000 r/min
Limiting speed	7 000 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	None
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

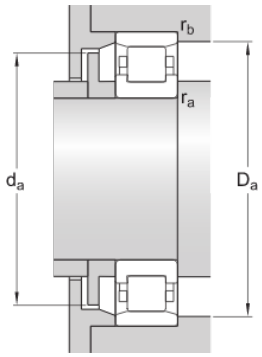
Technical Specification

SKF performance class	SKF Explorer

NOT FOUND

Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	29 mm	Width
d_1	≈ 77.5 mm	Shoulder diameter of inner ring
E	106.5 mm	Raceway diameter of outer ring
$r_{1,2}$	min. 2 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension
s	max. 2 mm	Permissible axial displacement



Abutment dimensions

d_a	min. 65 mm	Diameter of spacer sleeve
d_a	max. 104 mm	Diameter of spacer sleeve
D_a	min. 109 mm	Diameter of housing abutment
D_a	max. 111 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	156 kN
Basic static load rating	C_0	143 kN
Fatigue load limit	P_u	18.6 kN

Reference speed		6 000 r/min
Limiting speed		7 000 r/min
Minimum load factor	k_r	0.12
Limiting value	e	0.2
Calculation factor	Y	0.6

Mass

Mass	1.46 kg

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