



SKF N 309 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	45 mm
Outside diameter	100 mm
Width	25 mm
Shoulder diameter of inner ring	64.4 mm
Raceway diameter of outer ring	88.5 mm
Chamfer dimension	1.5 mm
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Permissible axial displacement	1.7 mm

Abutment dimensions	
Diameter of spacer sleeve	54 mm
Diameter of spacer sleeve	86 mm
Diameter of housing abutment	91 mm
Diameter of housing abutment	92.3 mm
Radius of fillet	1.5 mm
Radius of fillet	1.5 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	112 kN
Basic static load rating	100 kN
Fatigue load limit	12.9 kN
Reference speed	7500 r/min
Limiting speed	8500 r/min
Minimum load factor	0.12
Limiting value	0.2
Calculation factor	0.6

Performance	
Basic dynamic load rating	112 kN
Basic static load rating	100 kN
Reference speed	7500 r/min
Limiting speed	8500 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	3.2 kg CO ₂ e

Logistics	
Product net weight	0.877 kg
eClass code	23-05-09-01
UNSPSC code	31171505

SKF drawings

