



SKF N 316 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	80 mm
Outside diameter	170 mm
Width	39 mm
Shoulder diameter of inner ring	110 mm
Raceway diameter of outer ring	151 mm
Chamfer dimension	2.1 mm
Chamfer dimension	2.1 mm
Permissible axial displacement	2.1 mm

Abutment dimensions	
Diameter of spacer sleeve	92 mm
Diameter of spacer sleeve	148 mm
Diameter of housing abutment	154 mm
Diameter of housing abutment	157 mm
Radius of fillet	2 mm
Radius of fillet	2 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	300 kN
Basic static load rating	290 kN
Fatigue load limit	36 kN
Reference speed	4300 r/min
Limiting speed	5000 r/min
Minimum load factor	0.12
Limiting value	0.2
Calculation factor	0.6

Performance	
Basic dynamic load rating	300 kN
Basic static load rating	290 kN
Reference speed	4300 r/min
Limiting speed	5000 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	14.1 kg CO ₂ e

Logistics	
Product net weight	3.91 kg
eClass code	23-05-09-01
UNSPSC code	31171505

SKF drawings