



Image may differ from product. See technical specification for details.

# NUP 217 ECP

### Single row cylindrical roller bearing, NUP design

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one integral flange and one loose flange ring on the inner ring, NUP design bearings can locate the shaft axially 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
- Locate the shaft axially in both directions
- Separable design

## Overview

## Dimensions

Bore diameter	85 mm
Outside diameter	150 mm
Width	28 mm

## Performance

Basic dynamic load rating	190 kN
Basic static load rating	200 kN
Reference speed	4 800 r/min
Limiting speed	5 300 r/min
SKF performance class	SKF Explorer

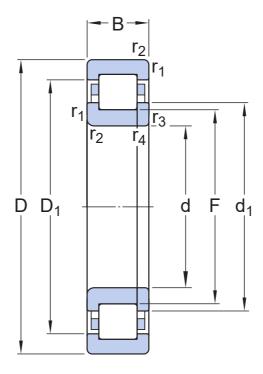
# **Properties**

Bearing part	Complete bearing
Axial displacement capability	None
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Non-metallic
Number of flanges, outer ring	2
Number of flanges, inner ring	1
Loose flange	Inner ring loose flange
Radial internal clearance	CN
Tolerance class	Normal
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

# Logistics

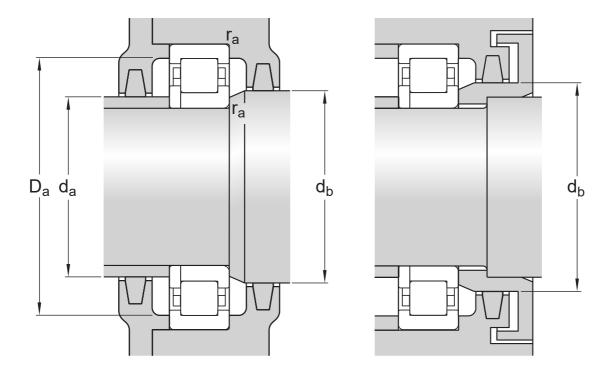
Product net weight	1.9 kg
eClass code	23-05-09-01
UNSPSC code	31171505

# **Technical specification**



# Dimensions

d	85 mm	Bore diameter
D	150 mm	Outside diameter
В	28 mm	Width
$d_1$	≈ 107 mm	Shoulder diameter of inner ring
$D_1$	≈ 130.3 mm	Shoulder diameter of outer ring
F	100.5 mm	Raceway diameter of inner ring
r <sub>1,2</sub>	min. 2 mm	Chamfer dimension
r <sub>3,4</sub>	min. 2 mm	Chamfer dimension of loose flange ring



## Abutment dimensions

da	min. 96 mm	Diameter of spacer sleeve
d <sub>b</sub>	min. 110 mm	Diameter of shaft abutment
Da	max. 138.5 mm	Diameter of housing abutment
ra	max. 2 mm	Radius of fillet

## Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	С	190 kN
Basic static load rating	C <sub>0</sub>	200 kN
Fatigue load limit	$P_{u}$	25 kN
Reference speed		4 800 r/min
Limiting speed		5 300 r/min
Minimum load factor	k <sub>r</sub>	0.15
Limiting value	е	0.2
Calculation factor	Υ	0.6

### Tolerances and clearances

- Tolerances: Normal (metric), P6, Normal (inch)
- Radial internal clearance: cylindrical bore, tapered bore
- Axial internal clearance: NUP, NJ + HJ

### **BEARING INTERFACES**

- Seat tolerances for standard conditions
- Tolerances and resultant fit

### **More Information**

#### ■ Product details **Engineering** Tools information Designs and variants SimPro Quick Principles of rolling bearing selection General bearing specifications SKF Product select General bearing knowledge Loads Bearing Frequency Calculator Bearing selection process Temperature limits LubeSelect for SKF greases Bearing failure and how to prevent it Permissible speed Heater selection tool Oil Injection Method Program Design considerations Designation system



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