



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

# **NUP 2306 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	30 mm
Outside diameter	72 mm
Width	27 mm

## Performance

Basic dynamic load rating	83 kN
Basic static load rating	75 kN
Reference speed	11 000 r/min
Limiting speed	12 000 r/min
SKF performance class	SKF Explorer

# **Properties**

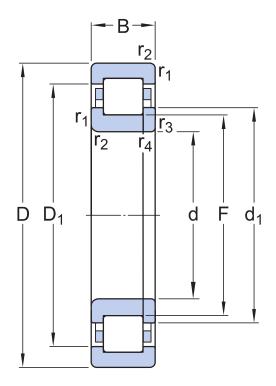
Bearing part	Complete bearing
Axial displacement capability	None
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Non-metallic
Number of flanges, outer ring	2
Number of flanges, inner ring	1
Loose flange	Inner ring loose flange
Radial internal clearance	CN
Tolerance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

# Logistics

Product net weight	0.551 kg
eClass code	23-05-09-01

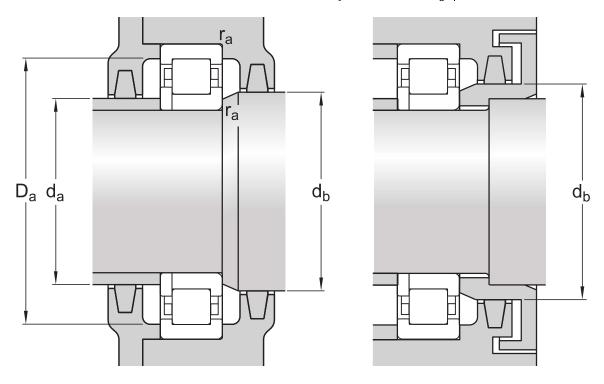
UNSPSC code 31171505

# **Technical specification**



## **Dimensions**

d	30 mm	Bore diameter
D	72 mm	Outside diameter
В	27 mm	Width
$d_1$	≈ 45 mm	Shoulder diameter of inner ring
$D_1$	≈ 58.48 mm	Shoulder diameter of outer ring
F	40.5 mm	Raceway diameter of inner ring
r <sub>1,2</sub>	min. 1.1 mm	Chamfer dimension
r <sub>3,4</sub>	min. 1.1 mm	Chamfer dimension of loose flange ring



## **Abutment dimensions**

d <sub>a</sub>	min. 37 mm	Diameter of spacer sleeve
d <sub>b</sub>	min. 47 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 65.1 mm	Diameter of housing abutment
r <sub>a</sub>	max. 1 mm	Radius of fillet

## Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	С	83 kN
Basic static load rating	$C_0$	75 kN
Fatigue load limit	$P_{\rm u}$	9.65 kN
Reference speed		11 000 r/min
Limiting speed		12 000 r/min
Minimum load factor	k <sub>r</sub>	0.25
Limiting value	е	0.3
Calculation factor	Υ	0.4

## Tolerances and clearances

## GENERAL BEARING SPECIFICATIONS

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



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