



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

## NU 318 ECP

### Single row cylindrical roller bearing, NU 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 no flanges on the inner ring, NU 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	3.543 in
Outside diameter	7.48 in
Width	1.693 in

## Performance

Basic dynamic load rating	82 055 lbf
Basic static load rating	80 931 lbf
Reference speed	3 800 r/min
Limiting speed	4 500 r/min
SKF performance class	SKF Explorer

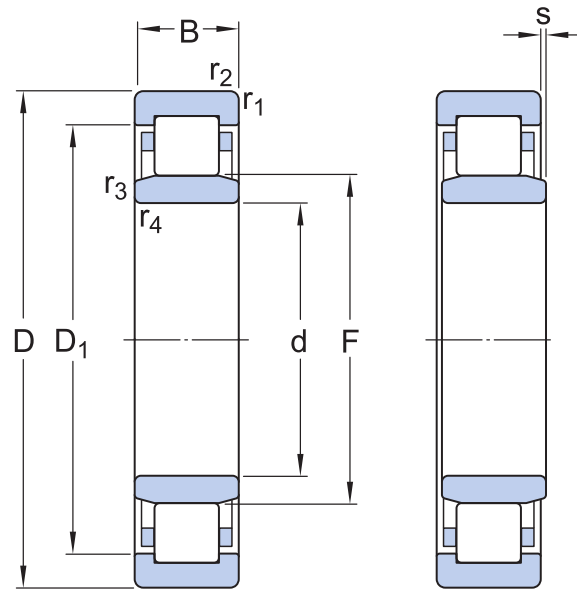
## Properties

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	2
Number of flanges, inner ring	0
Loose flange	None
Radial internal clearance	CN
Tolerance class	Normal
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

## Logistics

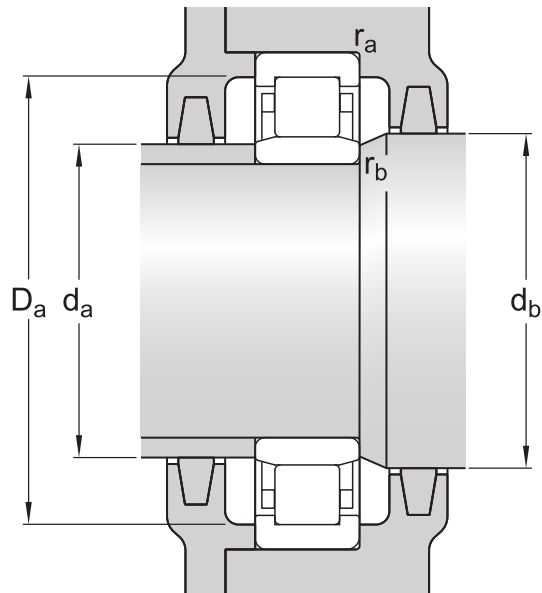
Product net weight	11.574 lb
UNSPSC code	31171505

## Technical specification



## Dimensions

$d$	3.543 in	Bore diameter
$D$	7.48 in	Outside diameter
$B$	1.693 in	Width
$D_1$	$\approx 6.311$ in	Shoulder diameter of outer ring
$F$	4.469 in	Raceway diameter of inner ring
$r_{1,2}$	min. 0.118 in	Chamfer dimension
$r_{3,4}$	min. 0.118 in	Chamfer dimension
$s$	max. 0.098 in	Permissible axial displacement



## Abutment dimensions

$d_a$	min. 4.094 in	Diameter of spacer sleeve
$d_a$	max. 4.331 in	Diameter of spacer sleeve
$d_b$	min. 4.567 in	Diameter of shaft abutment
$D_a$	max. 6.902 in	Diameter of housing abutment
$r_a$	max. 0.098 in	Radius of fillet
$r_b$	max. 0.098 in	Radius of fillet

## Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	82 055 lbf
Basic static load rating	$C_0$	80 931 lbf
Fatigue load limit	$P_u$	9 667 lbf
Reference speed		3 800 r/min
Limiting speed		4 500 r/min
Minimum load factor	$k_f$	0.15
Limiting value	e	0.2
Calculation factor	Y	0.6

## Associated products

## Compatible products

### Recommended product

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Angle ring (L-shaped thrust collar) for single row cylindrical roller bearings, NU or NJ design

[HJ 318 EC](#)

## More Information

### Product details

[Designs and variants](#)

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[General bearing specifications](#)

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[Loads](#)

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[Temperature limits](#)

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[Permissible speed](#)

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[Design considerations](#)

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[Designation system](#)

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### Engineering information

[Principles of rolling bearing selection](#)

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[General bearing knowledge](#)

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[Bearing selection process](#)

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[Bearing failure and how to prevent it](#)

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### Tools

[SimPro Quick](#)

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[SKF Product select](#)

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[Bearing Frequency Calculator](#)

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[LubeSelect for SKF greases](#)

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[Heater selection tool](#)

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[Oil Injection Method Program](#)

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