



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

# RNU 202 ECP

Single row cylindrical roller bearing, NU design, without inner ring

Single row cylindrical roller bearings of the NU design without an inner ring consist of an outer ring with a roller and cage assembly. They are typically used in applications where hardened and ground raceways are provided on the shaft. Without the inner ring, a larger shaft diameter can be used to provide a stronger, stiffer shaft. The bearings can

accommodate axial displacement in both directions, limited only by the width of the raceway on the shaft.

- High radial load carrying capacity
- Enable a stronger, stiffer shaft
- Low friction
- Long service life
- Accommodate axial displacement in both directions

# **Overview**

## **Dimensions**

Bore diameter	19.3 mm
Outside diameter	35 mm
Width	11 mm

### **Performance**

Basic dynamic load rating	12.5 kN
Basic static load rating	10.2 kN
Reference speed	22 000 r/min
Limiting speed	26 000 r/min

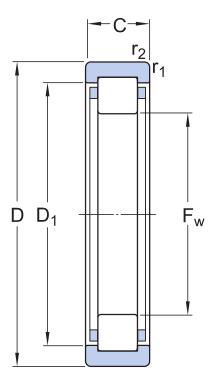
# **Properties**

Bearing part	Bearing without inner ring
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Non-metallic
Number of flanges, outer ring	2
Loose flange	None
Tolerance class	Normal
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

# Logistics

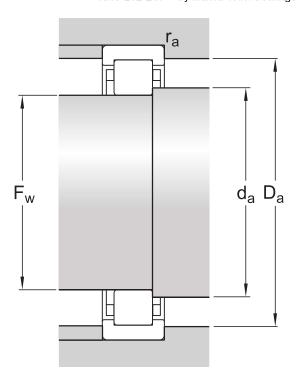
Product net weight	0.038 kg
eClass code	23-05-09-01
UNSPSC code	31171505

# **Technical specification**



## **Dimensions**

F <sub>w</sub>	19.3 mm	Diameter under rollers
D	35 mm	Outside diameter
С	11 mm	Width
$D_1$	≈ 27.7 mm	Shoulder diameter outer ring
r <sub>1.2</sub>	min. 0.6 mm	Corner radius



## **Abutment dimensions**

d <sub>a</sub>	max. 21.9 mm	Abutment diameter shaft
D <sub>a</sub>	max. 31.3 mm	Abutment diameter housing
r <sub>a</sub>	max. 0.6 mm	Fillet radius

## Calculation data

Basic dynamic load rating	С	12.5 kN
Basic static load rating	$C_0$	10.2 kN
Fatigue load limit	$P_{u}$	1.22 kN
Reference speed		22 000 r/min
Limiting speed		26 000 r/min
Calculation factor	k <sub>r</sub>	0.15
Limiting value	е	0.2
Calculation factor	Υ	0.6

## 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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