

# RNU 306Single row cylindrical roller<sup>®</sup> bearing, NU design, without inner

# ring

# 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

#### Dimensions

Bore diameter	42 mm
Outside diameter	72 mm
Width	19 mm

#### Performance

Basic dynamic load rating	36.9 kN
Basic static load rating	33.5 kN
Reference speed	10 000 r/min
Limiting speed	12 000 r/min

#### Properties

Bearing part	Bearing without inner ring
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Number of flanges, outer ring	2
Loose flange	None
Coating	Without
Sealing	Without

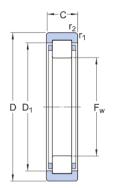
Overview



Lubricant	None
Relubrication feature	Without



# **Technical Specification**

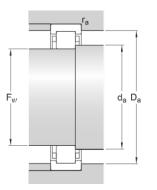


## Dimensions

Fw	42 mm	Diameter under rollers
D	72 mm	Outside diameter
С	19 mm	Width
$D_1$	≈ 56.98 mm	Shoulder diameter outer ring
r <sub>1,2</sub>	min. 1.1 mm	Corner radius

#### Abutment dimensions

d <sub>a</sub> max. 45.9 mm	Abutment diameter shaft
D <sub>ε</sub> max. 65.5 mm	Abutment diameter housing
<sup>r</sup> a max.1 mm	Fillet radius



### Calculation data

Basic dynamic load rating	С	36.9 kN
Basic static load rating	C <sub>0</sub>	33.5 kN
Fatigue load limit	P <sub>u</sub>	4.25 kN
Reference speed		10 000 r/min
Limiting speed		12 000 r/min
Calculation factor	k <sub>r</sub>	0.15
Limiting value	е	0.2
Calculation factor	Y	0.6



#### Mass

Mass bearing

0.26 kg



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