

# NUP 304 ECPSingle row cytinorical <sup>®</sup> roller bearing, NUP design

## 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

#### Dimensions

Bore diameter	20 mm
Outside diameter	52 mm
Width	15 mm

#### Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	26 kN
Reference speed	15 000 r/min
Limiting speed	18 000 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
Coating	Without

# Overview



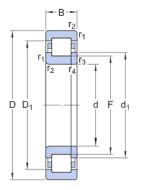
Sealing	Without
Lubricant	None
Relubrication feature	Without



SKF Explorer

# **Technical Specification**

SKF performance class



d<sub>b</sub>

d

## Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
В	15 mm	Width
$d_1$	≈ 31.2 mm	Shoulder diameter of inner ring
$D_1$	≈ 41.85 mm	Shoulder diameter of outer ring
F	27.5 mm	Raceway diameter of inner ring
r <sub>1,2</sub>	min. 1.1 mm	Chamfer dimension
r <sub>3,4</sub>	min. 0.6 mm	Chamfer dimension of loose flange ring

# Abutment dimensions

d <sub>a</sub> min. 26.1 mm	Diameter of spacer sleeve
d <sub>t</sub> min. 33 mm	Diameter of shaft abutment
D <sub>€</sub> max. 45.4 mm	Diameter of housing abutment
r <sub>a</sub> max.1 mm	Radius of fillet

### Calculation data

D<sub>a</sub> d<sub>a</sub>

Basic dynamic load rating	С	35.5 kN
Basic static load rating	C <sub>0</sub>	26 kN
Fatigue load limit	P <sub>u</sub>	3.25 kN



Reference speed		15 000 r/min
Limiting speed		18 000 r/min
Minimum load factor	k <sub>r</sub>	0.15
Limiting value	e	0.2
Calculation factor	Y	0.6

#### Mass

Mass

0.16 kg



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