



NKI 9/12 Single row needle roller bearing with machined rings, with flanges

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Single row needle roller bearings incorporate cylindrical rollers that are small in diameter relative to their length. Owing to their large number of rollers, the bearings have a high load carrying capacity. The outer ring includes two integral flanges to guide the bearing axially and an annular groove with one or more lubrication holes to facilitate relubrication.

- High radial load carrying capacity
- High stiffness
- Low cross-sectional height
- Accommodate axial displacement in both directions
- Separable design

Overview

Dimensions

Bore diameter	9 mm
Outside diameter	19 mm
Width	12 mm

Performance

Basic dynamic load rating	6.71 kN
Basic static load rating	8.15 kN
Reference speed	26 000 r/min
Limiting speed	30 000 r/min

Properties

Bearing part	Complete bearing
Number of rows	1
Outer ring type	Machined (solid)
Aligning feature	Without
Cage	Sheet metal
Number of flanges, outer ring	2
Radial internal clearance	CN
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without

Lubricant	None
Relubrication feature	With

Technical Specification

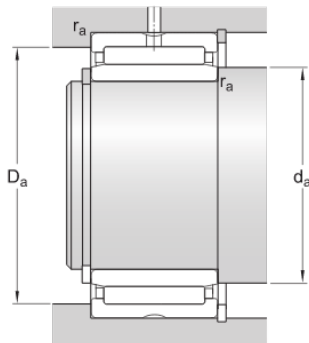


Dimensions

d	9 mm	Bore diameter
D	19 mm	Outside diameter
B	12 mm	Width
F	12 mm	Raceway diameter inner ring
r _{1,2}	min. 0.3 mm	Chamfer dimension outer ring
s	max. 1.5 mm	Permissible axial displacement from the normal position of one bearing ring relative to the other

Abutment dimensions

d _a	min. 11 mm	Smallest permissible abutment diameter shaft, bearings with flanges
D _a	max. 17 mm	Abutment diameter housing (with flanges)
r _a	max. 0.3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	6.71 kN
Basic static load rating	C ₀	8.15 kN
Fatigue load limit	P _u	0.965 kN
Reference speed		26 000 r/min
Limiting speed		30 000 r/min

Mass

Mass bearing

0.017 kg

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