

NA 4844Single 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	220 mm
Outside diameter	270 mm
Width	50 mm

Performance

Basic dynamic load rating	238 kN
Basic static load rating	815 kN
Reference speed	1 700 r/min
Limiting speed	1 900 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

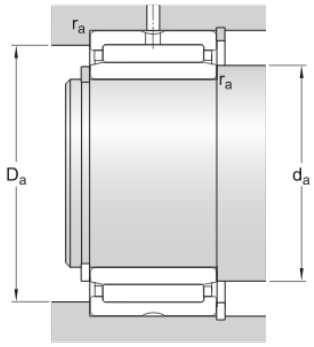
Lubricant	None
Relubrication feature	With

Technical Specification

NOT FOUND

Dimensions

d	220 mm	Bore diameter
D	270 mm	Outside diameter
B	50 mm	Width
F	240 mm	Raceway diameter inner ring
$r_{1,2}$	min. 1.5 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. 228 mm	Smallest permissible abutment diameter shaft, bearings with flanges
D_a	max. 262 mm	Abutment diameter housing (with flanges)
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	238 kN
Basic static load rating	C_0	815 kN
Fatigue load limit	P_u	81.5 kN
Reference speed		1 700 r/min
Limiting speed		1 900 r/min

Mass

Mass bearing	6.33 kg

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