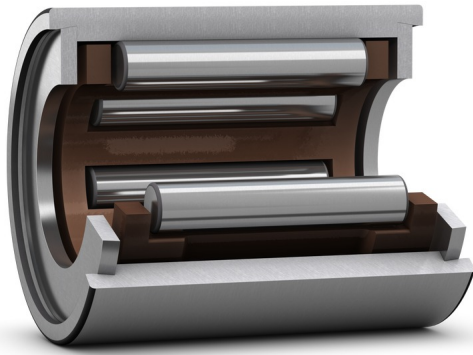


# NK 5/10 TN Single row needle roller bearing with machined rings, with flanges, without inner ring



## Single row needle roller bearing with machined rings, with flanges, without inner ring

Single row needle roller bearings without an inner ring consist of an outer ring with a needle roller and cage assembly. They are an excellent choice for compact bearing arrangements in applications where hardened and ground raceways can be provided on the shaft. The outer ring includes two non-separable closure rings that act as flanges to guide the bearing axially.

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

## Overview

## Dimensions

Bore diameter of needle roller complement	5 mm
Outside diameter	10 mm
Width	10 mm

## Performance

Basic dynamic load rating	2.29 kN
Basic static load rating	2 kN
Reference speed	36 000 r/min
Limiting speed	40 000 r/min

## Properties

Bearing part	Bearing without inner ring
Number of rows	1
Outer ring type	Machined (solid)
Aligning feature	Without
Cage	Non-metallic
Number of flanges, outer ring	2
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without

Lubricant	None
Relubrication feature	Without

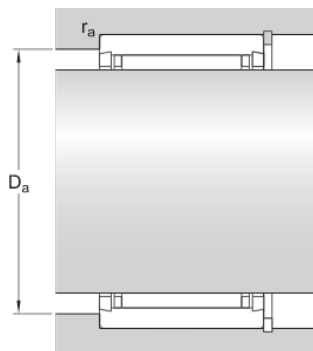
# Technical Specification



## Dimensions

$F_w$	5 mm	Diameter under rollers
$D$	10 mm	Outside diameter
$C$	10 mm	Width
$r_{1,2}$	min. 0.15 mm	Chamfer dimension outer ring

## Abutment dimensions



$D_a$	max. 8.8 mm	Abutment diameter housing (with flanges)
$r_a$	max. 0.1 mm	Fillet radius

## Calculation data

Basic dynamic load rating	$C$	2.29 kN
Basic static load rating	$C_0$	2 kN
Fatigue load limit	$P_u$	0.212 kN
Reference speed		36 000 r/min
Limiting speed		40 000 r/min

## Mass

Mass bearing

0.0031 kg

### Associated seals



G  
5x10x2  
S      Radial shaft seal with a low cross-sectional height, single lip

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