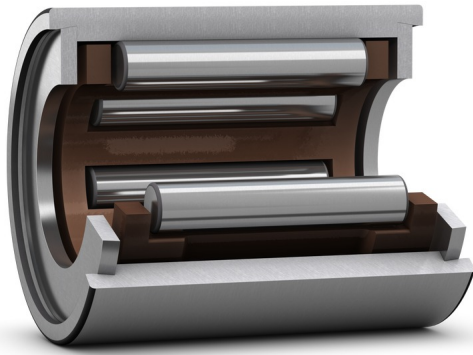


NK 10/12 TN Single row needle roller bearing with machined rings, with flanges, without inner ring



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	10 mm
Outside diameter	17 mm
Width	12 mm

Performance

Basic dynamic load rating	4.57 kN
Basic static load rating	5.7 kN
Reference speed	28 000 r/min
Limiting speed	32 000 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

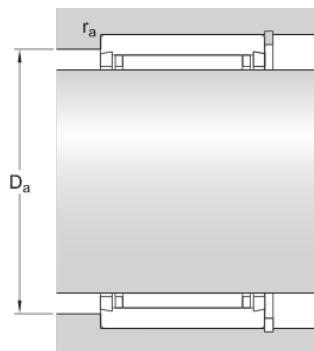
Technical Specification



Dimensions

F_w	10 mm	Diameter under rollers
D	17 mm	Outside diameter
C	12 mm	Width
$r_{1,2}$	min. 0.3 mm	Chamfer dimension outer ring

Abutment dimensions



D_a	max. 15 mm	Abutment diameter housing (with flanges)
r_a	max. 0.3 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	4.57 kN
Basic static load rating	C_0	5.7 kN
Fatigue load limit	P_u	0.63 kN
Reference speed		28 000 r/min
Limiting speed		32 000 r/min

Mass

Mass bearing

0.01 kg

Associated seals



G 10x17x3	Radial shaft seal with a low cross-sectional height, single lip
SD 10x17x3	Radial shaft seal with a low cross-sectional height, double lip

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