

RNA 4852

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 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



Dimensions		
F _w	285 mm	Diameter under rollers
D	320 mm	Outside diameter
C	60 mm	Width
r _{1,2}	min. 2 mm	Chamfer dimension outer ring



Abutment dimensions		
D _a	max. 311 mm	Diameter of housing abutment
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	358 kN
Basic static load rating	C ₀	1 200 kN

Fatigue load limit	P_u	118 kN
Reference speed		1 400 r/min
Limiting speed		1 500 r/min



Associated seals	
285x320x16 HDS2 R	Radial shaft seal

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5, ISO - F6 (F_w)
- Radial internal clearance: table

DESIGN CONSIDERATIONS

- Housing tolerances: table
- Shaft tolerances: Operating clearance