



SKF RNA 4901

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 integral flanges to guide the bearing axially and an annular groove with one or more lubrication holes to facilitate relubrication.

Technical specifications

Dimensions	
Diameter under rollers	16 mm
Outside diameter	24 mm
Width	13 mm
Chamfer dimension outer ring	0.3 mm
Bore diameter of needle roller complement	16 mm

Abutment dimensions	
Diameter of housing abutment	22 mm
Fillet radius	0.3 mm

Calculation data	
Basic dynamic load rating	9.9 kN
Basic static load rating	12.2 kN
Fatigue load limit	1.46 kN
Reference speed	22000 r/min
Limiting speed	26000 r/min

Associated seals	
Radial shaft seal with a low cross-sectional height, single lip	G 16x24x3
Radial shaft seal with a low cross-sectional height, double lip	SD 16x24x3

Performance	
Basic dynamic load rating	9.9 kN
Basic static load rating	12.2 kN
Reference speed	22000 r/min
Limiting speed	26000 r/min

Properties	
Bearing part	Bearing without inner ring
Number of rows	1
Outer ring type	Machined (solid)
Aligning feature	Without
Cage	Sheet steel
Number of flanges, outer ring	2
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	With
Indicative carbon footprint for new product	0.08 kg CO ₂ e

Logistics	
Product net weight	0.021 kg
eClass code	23-05-09-03
UNSPSC code	31171512

SKF drawings

