



SKF RNA 6903

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	22 mm
Outside diameter	30 mm
Width	23 mm
Chamfer dimension outer ring	0.3 mm
Bore diameter of needle roller complement	22 mm

Abutment dimensions	
Diameter of housing abutment	28 mm
Fillet radius	0.3 mm

Calculation data	
Basic dynamic load rating	18.7 kN
Basic static load rating	30.5 kN
Fatigue load limit	3.75 kN
Reference speed	18000 r/min
Limiting speed	20000 r/min

Associated seals	
Radial shaft seal with a low cross-sectional height, single lip	G 22x30x4
Radial shaft seal with a low cross-sectional height, double lip	SD 22x30x4

Performance	
Basic dynamic load rating	18.7 kN
Basic static load rating	30.5 kN
Reference speed	18000 r/min
Limiting speed	20000 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	0.15 kg CO ₂

Logistics	
Product net weight	0.042 kg
eClass code	23-05-09-03
UNSPSC code	31171512

SKF drawings

