



SKF RPNA 35/52

Alignment needle roller bearings, without an inner ring

Alignment needle roller bearings are self-aligning and offer a compact solution in applications where less space is available. Owing to their large number of rollers, they have a high load carrying capacity. Their internal design, where a convex outer ring meets two concave seating rings encased in a drawn sleeve, enables the bearings to accommodate initial static misalignment. Bearings without an inner ring are an excellent choice for compact bearing arrangements, if the shaft can be hardened and ground.

Technical specifications

Dimensions	
Diameter under rollers	35 mm
Outside diameter	52 mm
Width	20 mm
Shoulder diameter sleeve	47.5 mm
Chamfer dimension sheet steel sleeve	0.8 mm
Bore diameter of needle roller complement	35 mm

Abutment dimensions	
Smallest permissible abutment diameter housing	46.5 mm
Diameter of housing abutment	47.5 mm
Fillet radius	0.8 mm

Calculation data	
Basic dynamic load rating	24.6 kN
Basic static load rating	45 kN
Fatigue load limit	5.6 kN
Reference speed	11000 r/min
Limiting speed	13000 r/min

Performance	
Basic dynamic load rating	24.6 kN
Basic static load rating	45 kN
Reference speed	11000 r/min
Limiting speed	13000 r/min

Properties	
Bearing part	Bearing without inner ring
Number of rows	1
Outer ring type	Drawn cup with open ends
Aligning feature	With
Cage	Sheet steel
Number of flanges, outer ring	2
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	0.51 kg CO ₂

Logistics	
Product net weight	0.142 kg
eClass code	23-05-09-03
UNSPSC code	31171512

SKF drawings

