



Image may differ from product. See technical specification for details.

RNA 4905.2RS

Single row needle roller bearing with machined rings, with flanges and integral sealing, 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.

- High radial load carrying capacity
- High stiffness
- Low cross-sectional height
- Accommodate axial displacement in both directions
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter of needle roller complement	30 mm
Outside diameter	42 mm
Width	17 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	27.5 kN
Reference speed	13 000 r/min
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

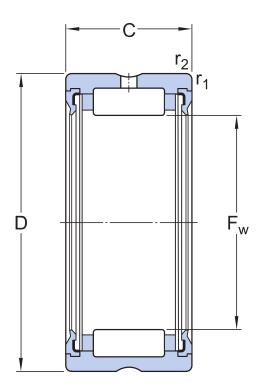
Properties

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	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	With

Logistics

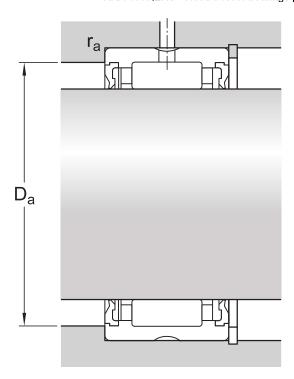
Product net weight	0.062 kg
eClass code	23-05-09-03
UNSPSC code	31171512

Technical specification



Dimensions

F _w	30 mm	Diameter under rollers
D	42 mm	Outside diameter
С	17 mm	Width
r _{1.2}	min. 0.3 mm	Chamfer dimension outer ring



Abutment dimensions

D_a	max. 40 mm	Diameter of housing abutment
r _a	max. 0.3 mm	Fillet radius

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	С	24.5 kN
Basic static load rating	C_0	27.5 kN
Fatigue load limit	$P_{\rm u}$	3.4 kN
Reference speed		13 000 r/min
Limiting speed		6 300 r/min

Associated seals

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

More Information

Product details	Engineering information	Tools
Designs and variants		SimPro Quick
General bearing specifications	Principles of rolling bearing selection	Bearing Select
Loads	General bearing knowledge	Engineering Calculator
Temperature limits	Bearing selection process	LubeSelect for SKF greases
Permissible speed	Bearing failure and how to prevent it	Heater Selection Tool
Design considerations	-	skf.com/mount
Designation system	-	



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