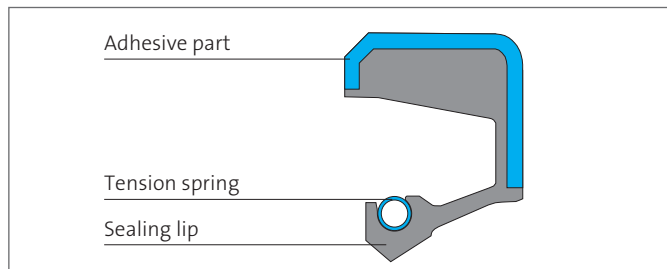


NOK RADIAMATIC SBR (RADI-SBR)



NOK Radiamatic SBR is a radial shaft seal consisting of an endlessly manufactured steel cage, firmly bonded to the rubber sealing lip. A helical tension spring assists radial contact pressure of the lip on the shaft.



VALUE TO THE CUSTOMER

- Low energy consumption due to reduced friction
- Advanced development based on classic shaft seals (L2M, Type 64, and others)
- Secure self-retaining fit
- Highly wear resistant
- High degree of shaft deflection
- High circumferential speeds

Applications

Self-retaining radial shaft seal mainly used as a roller bearing protection in the pulp & paper industry (calander and press rolls) and in the rolling mill industry (work and support rolls). Also used in gear boxes (mainly according to DIN 3760 A/AS).

Material

Sealing lip	Adhesive part	Tension spring
80 NBR A941	Steel	Stainless steel
80 HNBR G488	Steel	Stainless steel
75 FKM F585	Steel	Stainless steel



FEATURES AND BENEFITS

Operating conditions

Material	80 NBR A941	80 HNBR G488	75 FKM F585
Mineral oils	-25 ... +100 °C	-20 ... +120 °C	-15 ... +180 °C
Water	+0 ... +100 °C	+0 ... +100 °C	+5 ... +80 °C
Lubricating greases	-25 ... +100 °C	-20 ... +120 °C	-15 ... +180 °C
Rolling oil emulsion	on enquiry	on enquiry	on enquiry
Pressure	0,03 MPa	0,03 MPa	0,03 MPa
Sliding speed	10 m/s	20 m/s	30 m/s

Other media on demand. The figures given are maximum values and must not be applied simultaneously.

Surface finish

Peak-to-valley heights	R_a	R_{max}
Sliding surface	0,32 ... 0,6 μm	$\leq 2,5 \mu\text{m}$
Base of groove	3,20 ... 0,4 μm	$\leq 6,3 \mu\text{m}$
Groove flanks	3,30 ... 0,4 μm	$\leq 15 \mu\text{m}$

Machining is carried out most effectively by plunge grinding, i. e. without forward feed. The surface hardness should be min. 30 HRC (min. depth of hardness 0,5 mm).

The higher the peripheral speed the lower should be the surface roughness R_a of the mating surface. In order to ensure a sufficient lubricating film the surface should not be too smooth.

Design note

The maximum permissible shaft offset (static offset, center axis offset) is dependent on the diameter d involved.

$\varnothing d$ [mm]	Permissible shaft offset
200 ... 1250	$\pm 2,5 \text{ mm}$

Please note the general design-related remarks in our technical manual.

Installation & assembly

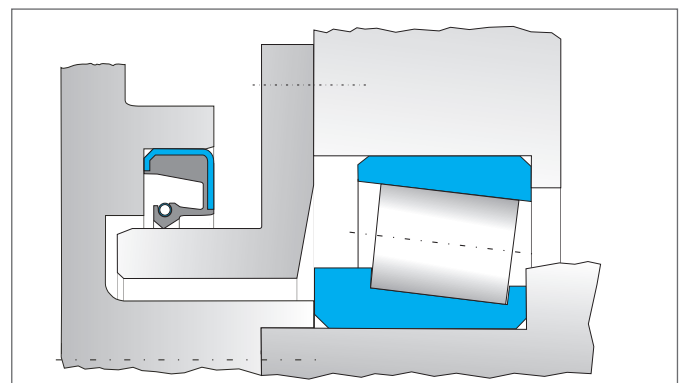
An axially accessible housing is necessary for the radial shaft seal NOK Radiamatic SBR.

Please note the installation instruction supplied with the seal.

Housing recommendations (outer diameter)

$\varnothing D$ [mm]	Tolerance [mm]
>250	+0 ... +0,081
>315	+0 ... +0,089
>400	+0 ... +0,063
>500	+0 ... +0,070
>630	+0 ... +0,080
>800	+0 ... +0,090
>1000	+0 ... +1,105

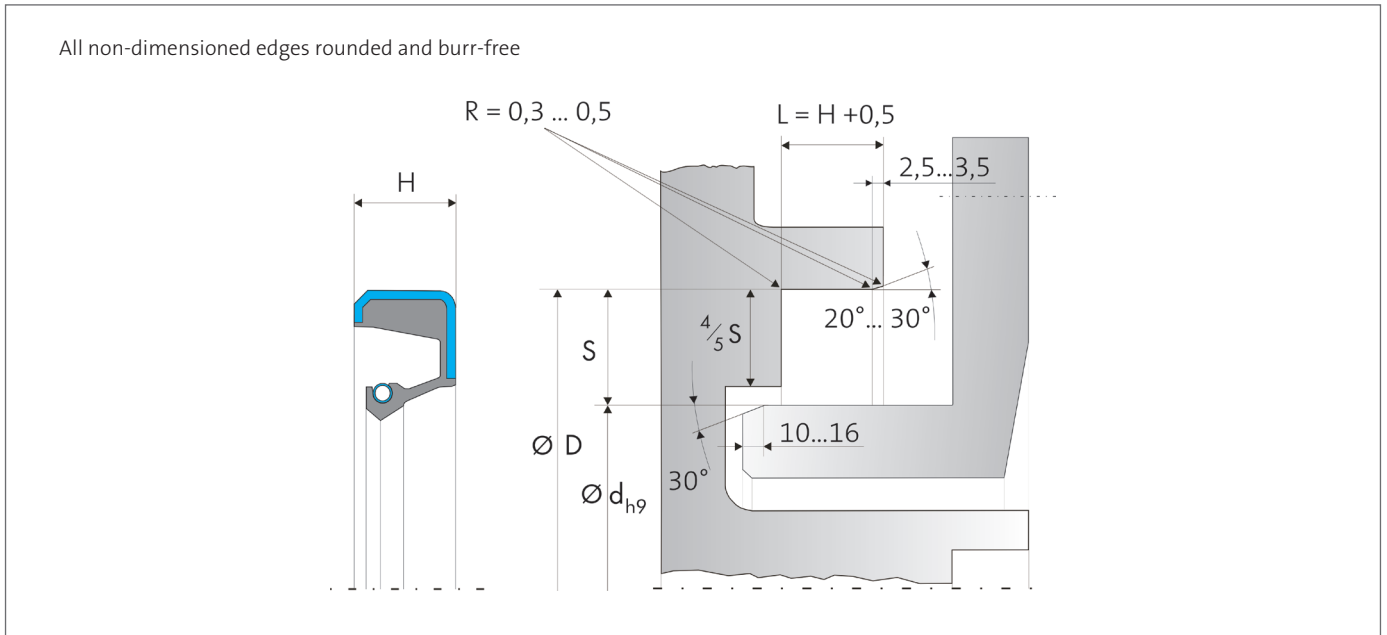
Typical sealing arrangement





FEATURES AND BENEFITS

Installation diagram



Please note the general design-related remarks in our technical manual.