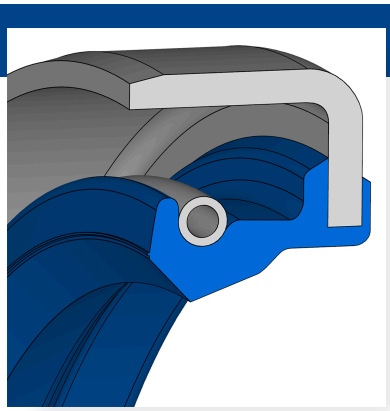

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Radial shaft seal Simmerring® B1

DESCRIPTION

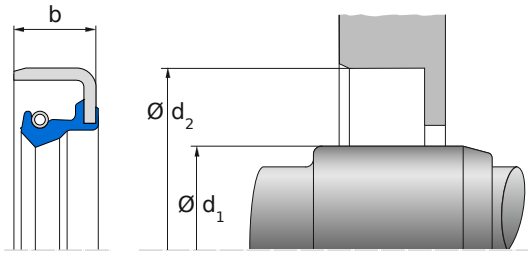
- Standard design according to DIN 3760
- With tension spring
- Open metallic outer jacket
- Without protective lip

FUNCTION

- Dynamic sealing of rotating shafts, independent of direction of rotation
- Good static seal between sealing lip and shaft at standstill
- Metallic outer jacket ensures tight and precise fit
- Self-retaining
- Limited sealing of low-viscosity and gaseous media and in split housings
- Additional gluing of the seal into the housing is recommended

DESIGN GUIDELINE

- Please refer to the technical manual for design



PRODUCT ADVANTAGES

- Tight fit in installation space (interference fit)
- Highest quality
- Longest service life
- Highest functional reliability

APPLICATIONS

- Axles (with moderate dirt exposure)
- Power tools
- Industrial gearboxes
- Heavy industry (cranes, calender gearboxes etc.)

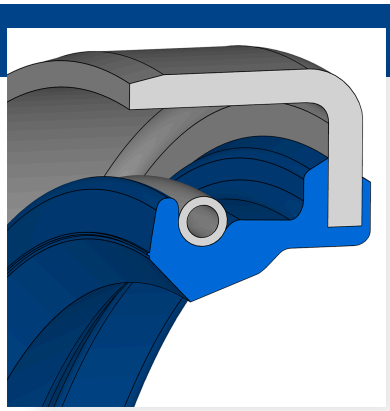
CONFORMITY AND CERTIFICATES

- Please consult the material data sheet valid for the respective material for current information on approvals and certificates, as this information depends on the compound and cannot be listed exhaustively here.

INSTALLATION GUIDELINE

- The prerequisite for perfect function of the seal is careful installation in accordance with the technical manual.
- Recommendation: Design the installation space so that axial support in the housing
- Please refer to the technical manual for further installation instructions.

FREUDENBERG
SEALING TECHNOLOGIES



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Radial shaft seal Simmerring® B1

STORAGE ADVISE

- Storage temperature <25°C
- No direct heat sources
- No direct sunlight
- No condensation in the storage room
- No exposure to ozone or ionizing radiation
- Recommendations based on the revision of ISO 2230 dated 16.09.1992

Permissible low temperature [°C]

72 NBR 902	75 FKM 585	75 FKM 595
-40*	-30*	-30*

* The low-temperature limit depends on shaft runout.

Temperature [°C]

Medium	72 NBR 902	75 FKM 585	75 FKM 595
Engine oils	100	150	150
Gear oils	100	150	150
Hypoid gear oils	80	140	140
ATF oils	100	150	150
Greases	100	150	150
Polyalkylene glycols (PAG)	(a)	(a)	(a)
Polyalphaolefins (PAO)	(a)	(a)	(a)
HLP according to DIN 51524 part 2	100	150	150

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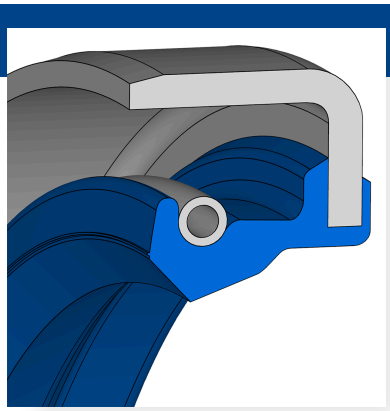
SEALING TECHNOLOGIES



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Radial shaft seal Simmerring® B1

Temperature [°C]

Medium	72 NBR 902	75 FKM 585	75 FKM 595
HLVP according to DIN 51524 part 3	100	150	150
HETG rapeseed oil*	(b)	(d)	(d)
HEES – synthetic esters	(b)	(d)	(d)
HEPG – polyglycols**	(b)	(d)	(d)
Group HFA**	(b)	(b)	(b)
Group HFB**	(b)	(b)	(b)
Group HFC**	(c)	(c)	(c)
Group HFD***	(c)	150	150
Heating oil EL and L	90	(c)	(c)
Brake fluid DOT 3 / DOT 4	(c)	(c)	(c)
Water**	(c)	(b)	(b)
Washing solution**	(c)	(b)	(b)
Air	100	200	200

a = When using FKM materials in synthetic lubricants (PAG and PAO), the maximum operating temperature must be determined by testing or a system trial.

b = conditionally resistant

c = not resistant

d = resistant, but generally not used for these media

* Operating limits are defined by the fluid

** Additional lubrication recommended

*** Resistance depends on the HFD type

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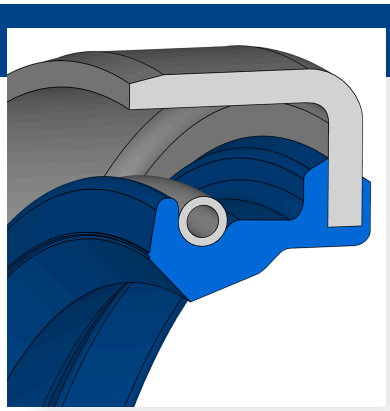
SEALING TECHNOLOGIES



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Radial shaft seal Simmerring® B1

Temperature range at the sealing lip [°C]

72 NBR 902	75 FKM 585	75 FKM 595
-40...100	-30...200	-30...200

The values given are based on a limited number of tests on standard test specimens (2 mm sample plates) from laboratory production. The data determined from finished parts may deviate from the above values depending on the manufacturing process and the part geometry.

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