SIMMERRING RADIAL SHAFT SEAL

The original Simmerring is a premium quality radial shaft seal ring conforming to DIN 3760 and ISO 6194-1 with an elastomeric outer diameter. The Simmerring can be used in numerous original equipment applications across a broad spectrum of market segments (e.g. gearboxes, transmissions, axles, engines and pumps).

The Simmerring is designed for easy, flawless installation. The elastomer outer diameter provides an optimal static sealing effect for housing bores, even with increased bore roughness, thermal expansion or split housings.

Even under difficult operating conditions, such as deviations due to run-out or coaxiality, the spring-loaded sealing lip provides reliable sealing.

For applications to counter light and medium dust and dirt exposure, Simmerrings are available with a protective lip in contact with the shaft surface (BA...SL).

The Simmerring standard product line in conformance with the A/AS DIN standard includes more than 2,100 radial shaft seal rings in the 4 – 810-mm range, covering all sizes standardized by DIN 3760 (A/AS) or ISO 6194-1, among others.

The high-quality standard compounds for Simmerrings (72 NBR 902 and 75 FKM 585) stand out for their especially high resistance to aging, their resistance to synthetic lubricants, their high resistance to wear, and optimal pumping ability. The standard Simmerring materials serve as reference compounds for the development of lubricants and thus are optimally adapted to the tribological system (compound, lubricant and shaft).

Simmerrings made of 72 NBR 902 and 75 FKM 585 also serve as references for the FB 73 11 008 release test of transmission oils for use in Siemens AG FLENDER gearboxes, which is recognized in the market as an industry standard and a benchmark for compatibility between lubricants and seals.

VALUES FOR THE CUSTOMER

- Outstanding sealing performance with robust and excellent sealing behavior even in harsh environments
- Superior reliability and life time due to low friction and low power loss
- Excellent wear resistance
- Excellent medium compatibility with mineral and synthetic lubricants
- Optimal pumping ability
- Simple installation
- About 95% of catalog items are available in stock and can be delivered in single or industrial packaging

Design BA..
conforming to DIN / ISO
Design A
Grooved OD

Design BA..SL
conforming to DIN / ISO
Design AS
Grooved OD

Design BA..
conforming to DIN / ISO
Design A
Smooth OD

Design BA..SL
conforming to DIN / ISO
Design AS
Smooth OD

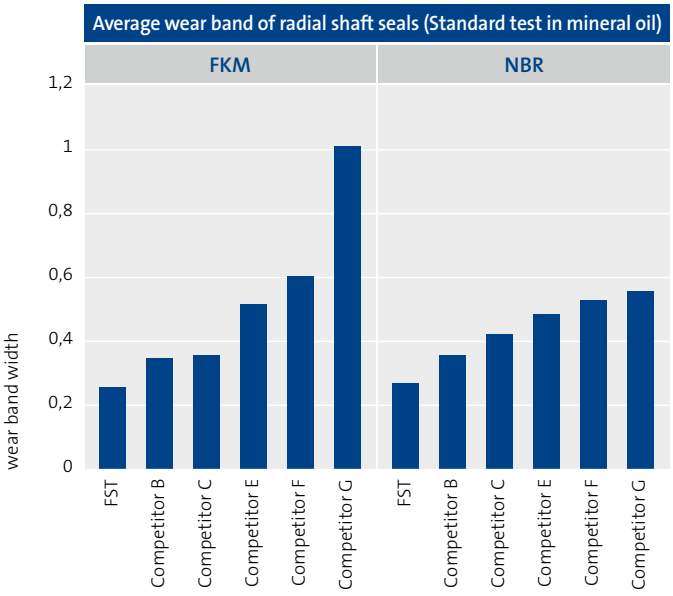
fluidseal AB Inc.

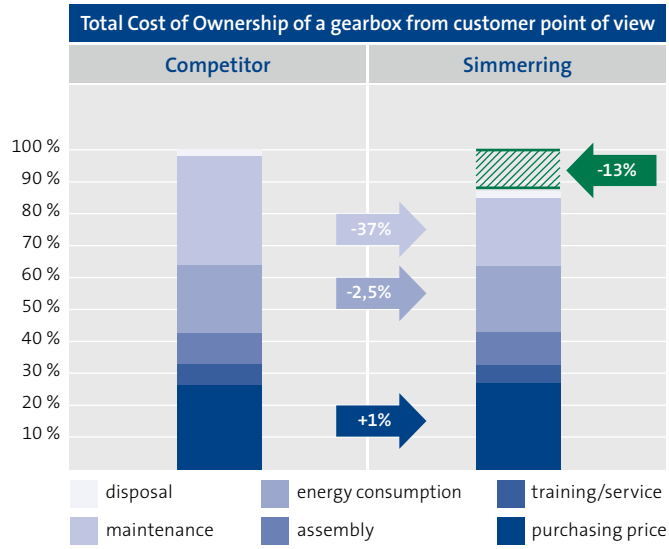
FREUDENBERG-NOK
INNOVATING TOGETHER

MODIFIED CATALOG ITEMS

For special working conditions and applications, Freudenberg-NOK Sealing Technologies offers the opportunity to significantly expand the standard product line's range of use through modifications:

Profile	Modification	Application
	Stainless steel spring (rustproof, 1.4571)	Water applications, corrosive media
	Spring with adapted spring force (stronger / weaker)	Applications with high circumferential speeds, lack of lubrication, strong vibrations increased shaft runout.
	Venting of the dust lip	Applications with linear shaft velocity, between 8–15 m/s (25–50 ft/s) and oil with dust lip. Vaccuum between the sealing lips can be prevented through ventilation.
	Greasing of the dust lip	The dust lip must always be greased to lubricate it. There is the possibility of obtaining a pre-greased Simmerring from FST.
	PTFE, nonwoven, or PTFE-impregnated nonwoven dust lip	Application with increased dirt entry, tire pressure control system, food applications, aggressive cleaning agents.





Despite the higher purchasing price of Simmerrings, the Total Cost of Ownership of gearboxes are lower with the usage of FNST products. The savings for Maintenance and Energy are **significant**.