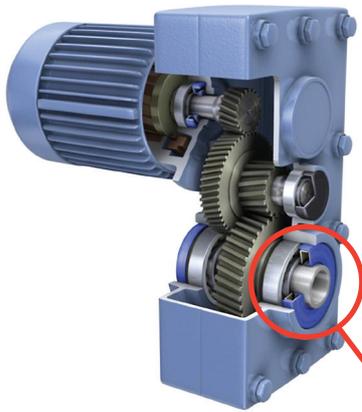


IMPERIAL STANDARD RANGE (ISR) SIMMERRING® SHAFT SEALS

The **Freudenberg Sealing Technologies** Imperial Standard Range (ISR) Simmerring shaft seal is a premium quality seal typically used in applications such as gearboxes, axles, transmissions, and engines.



VALUES FOR THE CUSTOMER

- Outstanding sealing performance with robust and excellent sealing behavior even in harsh environment
- Superior reliability and life time due to low friction and low power loss
- Excellent wear resistance
- Simple installation
- Excellent medium compatibility with mineral and synthetic lubricants
- Covers a wide range of applications
- Standardized according ISO 6194

DESIGN FEATURES

Material properties of 75 FKM 585

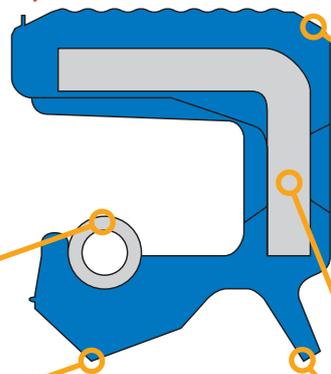
- FKM terpolymer with excellent compatibility to modern lubricants
- Excellent wear resistance
- Temperature range: -25°C to 160°C

Garter Spring

- Low load design parameters
- Provides long life load stabilization

Sealing Lip

- Trimmed lip provides excellent sealing performance
- Extremely low friction generates less heat
- Pressure stable up to 0.5 bar/50 kPa
- Circumferential speed up to 40 m/s
- Excellent with bi-directional shaft rotation



Rubber O. D.

- Excellent static sealing behavior independent of housing materials and surface roughness
- Low assembly forces due to grooved O. D.
- Tight fit for pressure up to 1.0 bar with proper installation and housing surface preparation

Metal insert

Dust-Lip

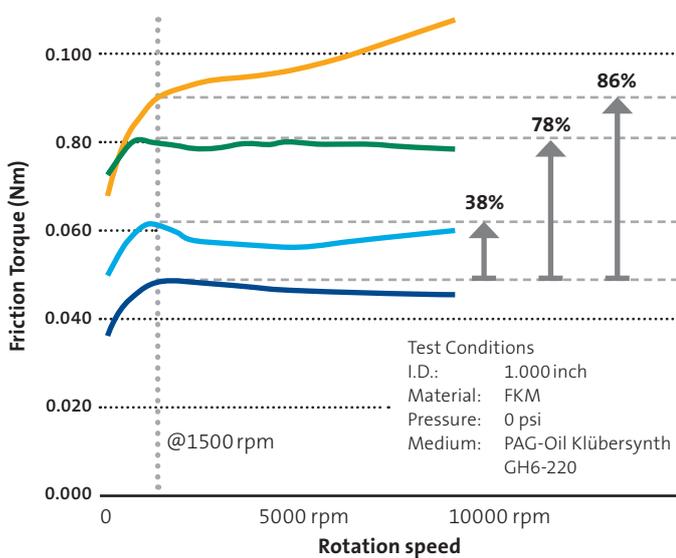
- Very low friction
- Excellent protection against dust, mud and water

FEATURES AND BENEFITS

Friction Torque and Power Loss (mineral oil and PAG oil)

- Up to 90% lower friction torque
- Up to 80% less specific heat generation within the sealing contact zone
- In average, up to 50% less seal wear than competitor seals

Friction torque

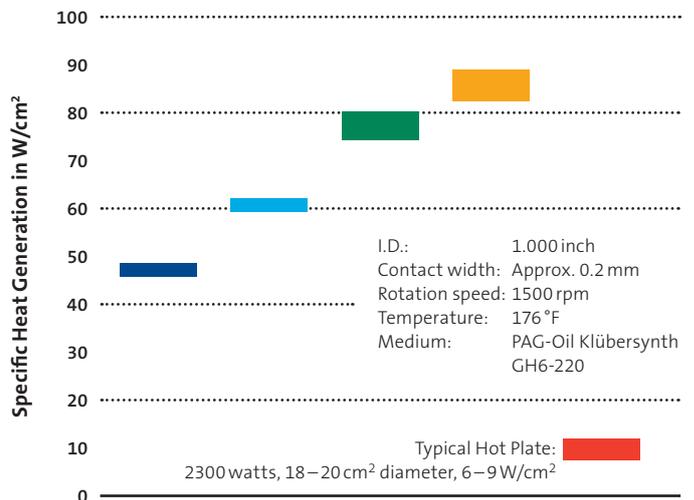


■ ISR Simmerring shaft seals ■ Competitor 1, Seal Design 1 ■ Competitor 1, Seal Design 2 ■ Competitor 2, Seal Design 1

ISR Simmerring shaft seals deliver:

- Better wear resistance and chemical compatibility due to high quality FKM elastomer
- Minimized effect from moderate pressure on seal life due to improved lip design
- Consistent performance proven out to 20,000 hours in appropriate sealing environment

Heat Generation



**ISR SIMMERRING SHAFT SEALS DELIVER
 LONGER SEAL LIFE AND HIGHER RELIABILITY
 RESULTING IN LOWER COSTS FOR OUR CUSTOMERS!**

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

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