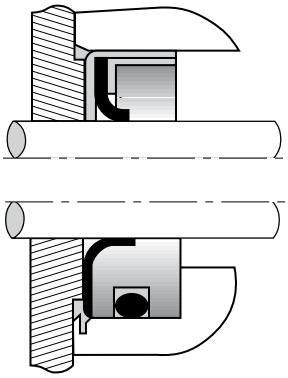
PTFE lipseals and energised seals



Eriflon's PTFE Lip Seal was introduced in the early 1970's. The seals were designed to bridge the gap between conventional elastomer lip seals and mechanical face seals. Hostile environments such as extreme temperatures, aggressive media, high surface speeds, high pressures, and lack of lubrication forced the designer to specify the expensive and complicated mechanical face type seals. Eriflon's PTFE Lip Seal provides the designer a significant iprovement in performance over elastomer lip seals at a much lower cost than the mechanical face seal.

Due to our unique manufacturing capabilities we are able to quickly supply the geometry and material which best meets your requirements. This is accomplished by utilising
modern computer-controlled equipment and the stocking of semi-finished components.
Eriflon PTFE Lip Seals solve difficult applications which are not addressed by conventional elastomer seals.

We exceed the performance of elastomer lip seals in the following areas:

- Greater chemical resistance
- Lower friction
- Capable of surface speeds to +30 meters/second
- Works to temperature extremes (-70°C to +250°C)
- Has extended seal life in dry or abrasive media
- Handles pressures to 35 bar
- Shaftspeeds up to 36 m/s

Successful Applications:

- Hydraulic motors and pumps
- chemical pumps
- Rotary unions
- Vacuum pumps
- Blowers
- Drilling and tapping spindles
- High-speed gearboxes
- Crankshafts of engines and compressors
- Robotics
- Pharmaceutical and food processing equipment
- Mixers
- Chemical processing equipment
- Actuators
- Alternators and generators
- Encoders
- Radar/targeting devices

Note:

- We stock the unique Garlock® PS-Seal in ca. 100 different dimensions
- PS-Seals are seen as the best PTFE-seals worldwide
- PS-Seals give the best results in lifetime-tests under the most difficult circumstanses
- Some types also have BGA-approval

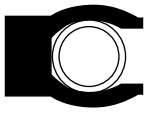
Element materials

Material Code	*Name and description*	*Application details*
SEALING LIP MATERIALS :.		
72	**Rulon® 641** Proprietary filled PTFE White colour	Meets FDA requirements. Moderate wear and heat resistance. Suitable for use on soft shafts such as 316 Stainless Steel.
F8	**Gylon 3510** Special filled PTFE White colour	Extreme wear resistant material for use in high-speed applications in dry or non-lubricating environments. Excellent material for use in water. Requires a shaft hardness of 55 HRC minimum. • Gylon white complies with FDA 21CFR1550. • It meets ingredient and extract requirements. • The fillers are acceptable under 21CFR 177.2600 • Branding ink complies with FDA 21 CFR.175.300
METAL COMPONENTS :		
M1	**Low-carbon steel**	Used for outer case, inner case and washers. Low cost. Limited corrosion resistance.
M2	**Aluminium**	Lightweight material used for outer case, inner case and washers. Low cost. Limited corrosion resistance.
M3	**Stainless Steel 304**	Used for outer case, inner case, washers and support rings. Good corrosion resistance.
M4	**Stainless Steel 316**	Used for outer case, inner case, washers and support rings. Good corrosion resistance.
M5	**Stainless Steel 316 TI**	Used for outer case, inner case, washers and support rings. 316 Stainless Steel with titanium for superior corrosion resistance.

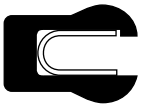
Rulon® is a registered trademark of Furon Company. Ekonol® is a registered trademark of SOHIO Company. Ask for our technical documentation.

Eriseals

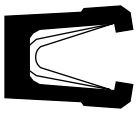
We have different executions. Please ask:
- Our technical 'omniseal documentation'
- FDA execution filled with silicone



Temp.: -70/+260°C
Velocity: 15 m/s
Helicoidal spring
200 bar
Type: 230-239



Temp.: -70/+260°C
Velocity: 15 m/s
V-spring
450 bar
Type: 220-225



Temp.: -70/+260°C
Static
V-spring
Type: 320-323

Temp.: -70/+260°C
Static
V-spring
Type: 348-349

FDA, filled with silicone
Omniseal 400A can be supplied with an FDA-silicone-filling.

Type RS
In this unique design the inserted stainless steel spring is totally protected by the PTFE-coating on the media side. Applications with high temperatures, defined friction forces and very elastic behaviour are characteristics for this sealing element. Even extra-pure media can be conveyed or sealed off with this seal, where the medium may not get into contact with the metal. This type is FDA approved and admitted for food and pharmaceutical drugs.

Type JS
The series JS is a variant of the RS type, but with a machined synthetic material jacket. Available in all sizes without additional costs. Mostly for small quantities. The jacket is available in PTFE or also in FDA approved UHMW-Polyethylene.