**O-PRO® SEAL TECHNOLOGY – SIMPLE, PROVEN & RELIABLE**

Viking Pump is the leader in internal gear innovation and the latest development is the patented O-PRO® Seal technology. O-PRO® Seals utilize a series of O-rings to create a robust seal and lubrication chamber, all in one. O-PRO® Barrier seal functions as both a seal and bracket bushing; O-PRO® Cartridge & Guard seals are simple retrofit options.

**O-PRO® BARRIER SEAL (PATENTED)**

**HOW IT WORKS:**

O-PRO® Barrier seal replaces packing or mechanical seal by occupying the internal bracket cavity with a machined seal gland, utilizing O-rings to seal externally on the bracket and internally on the shaft. A combination of O-rings and lubricating fluid provide a robust seal preventing process fluid from leaking out of the pump. O-PRO® Barrier design also contains lubrication between the shaft and bushing reducing wear.

**O-PRO® CARTRIDGE SEAL (PATENT PENDING)**

**HOW IT WORKS:**

O-PRO® Cartridge seal replaces packing or mechanical seal by using O-rings to seal externally on the bracket and internally on the shaft. The combination of O-rings and lubricating fluid provide a robust seal, keeping process fluid from leaking out of the pump. The O-PRO® Cartridge seal allows for an easy retrofit while addressing any need for stainless steel seal construction.

**O-PRO® GUARD SEAL (PATENT PENDING)**

**HOW IT WORKS:**

O-PRO® Guard seal replaces packing or mechanical seal by sealing between the bracket, sleeve & shaft surfaces with a series of O-rings. The series of O-rings and lubrication provide a robust seal for many applications. The stainless steel construction utilizes a sleeve that is secured to the shaft to address any shaft wear concerns to ensure superior performance.
**O-PRO® BARRIER**

O-Rings trap clean lubrication inside the seal to reduce wear between the shaft and the bracket bushing, keeping all parts in optimal condition.

**O-PRO® GUARD & O-PRO® CARTRIDGE**

Existing bracket bushing is utilized; packing is removed, and seal is installed in place of packing gland.

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**MAINTENANCE**

All O-Pro® seals should be re-greased every 500 hours. The relief fitting enables visual inspection of the grease to ensure no process fluid leaks. Periodic re-tensioning is not required. O-Pro® seals may be removed with the pump in place to replace O-rings, by removing the bearing housing. Spacer couplings are required to provide enough room to remove the O-Pro® Barrier completely. Spacer couplings are not needed if the rotor/shaft is removed from the head end of the pump, which also makes it easier to re-install the O-Pro® Barrier and then re-install the rotor/shaft.

**RETROFITABILITY**

The following existing Viking pump series may be retrofitted to utilize the O-Pro® seals:

- 124A Series™
- 324A Series™
- 224A Series™
- 424A Series™
- 324A Series™
- 4324A Series™
- 127A Series™
- 4127A Series™
- 227A Series™
- 4227A Series™

Kits are available with all parts needed for conversion. If shafts are worn, new rotor/shafts may be required for conversion to ensure sealing. Q and QS size brackets may require modification or replacement, if using the O-Pro® Barrier, which is not included in the kits.

**TYPICAL APPLICATIONS**

Inks, paints, molasses, edible oils, corn syrup, honey, lube oil, grease, asphalt, wax, resins, starch, fats, isocyanates, adhesives and many more!

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**KIT PART NUMBERS**

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<th>H-HL</th>
<th>K-KK</th>
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<th>LS</th>
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<th>M</th>
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**NOTE:** O-Pro® Cartridge Kit does not contain O-rings. O-ring kit must be purchased separately.

**MAXIMUM RPM**

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<th>LQ (RPM)</th>
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