

## TLP Series

SANITARY ROTARY LOBE PUMP



For more than half a century, SPX FLOW has been a leader in the design, manufacture and application of positive displacement pumps. SPX FLOW is dedicated to raising productivity, product quality and profitability for its equipment and systems customers.

From this dedication has come advancements in equipment development and applications; advancements that have changed the way designers solve problems. SPX FLOW PD pumps are in thousands of challenging sanitary, chemical and industrial applications around the world.

Based in Charlotte, North Carolina, SPX FLOW (NYSE: FLOW) is a multi-industry manufacturing company with operations in more than 35 markets worldwide. SPX FLOW's innovative, world-class products and highly-engineered solutions are helping to meet the needs of a constantly developing world and growing global population. You'll find our innovative solutions in everything from dairy plants and power plants to oil and gas pipelines, and the power grid. SPX FLOW is really everywhere you look.

We help our customers around the globe expand and enhance their food and beverage, power and energy and industrial production processes. For more information, please visit [www.spxflow.com](http://www.spxflow.com)

## TLP Sanitary Rotary Lobe Pump with optimal efficiency

### OPERATIONAL FEATURES

- Smooth flow
- Gentle product handling
- Dry running ability with double seal
- Handles low and high viscosity products
- Simple maintenance
- Hygienic design
- Low sound level
- CIP capability standard
- Free draining pump housing
- Unique rotor attachment
- Robust construction
- Process flexibility
- Single mechanical seals standard. Optional double mechanical seals also available
- Grease lubricated bearings for positive lubrication over speed, temperature



### INSTALLATION FEATURES

- Bi-directional flow
- Easy service and maintenance
- Horizontal or vertical mounting
- Easy to disassemble and reassemble
- 316L stainless steel pump body and cover
- Versatile 4-way mounting of gear case, including vertical alignment of ports

## PRODUCT BENEFITS

- Pumps with flushed double mechanical seals can run dry indefinitely
- Very low shear, product not damaged during pumping
- No internal rotor contact
- Large fluid cavities can pump liquids with large solids
- No cross-contamination of lubricating oil into product zone due to unique gear case design
- Pumps are energy efficient and easily cleaned, maintained and repaired



## Typical Product Applications

### BAKERY

Batters; Flavorings; Frostings; Fruit Fillings; Fats & Oils; Sweeteners; Yeast Slurry



### BEVERAGE

Beer, Wort, Yeast; Soft Drinks; Fruit Concentrates; Fruit Drinks



### CANNING

Baby Foods, Soups, Stews; Tomato Paste; Fruit Puree; Vegetables, Diced, Slurries; Puddings, Jams, Jellies; Salad Dressings, Mayonnaise



### CONFECTIONERY

Syrups; Cream Fillings; Chocolate



### COSMETICS

Face Creams & Lotions; Hair Styling Gels & Liquids; Essential Oils; Dyes & Alcohols



### DAIRY

Cream, Milk; Cheese Curd & Whey; Cottage Cheese; Yogurt



### MEAT PACKING

Meat Emulsions; Ground Meats; Pet Foods; Animal Fats



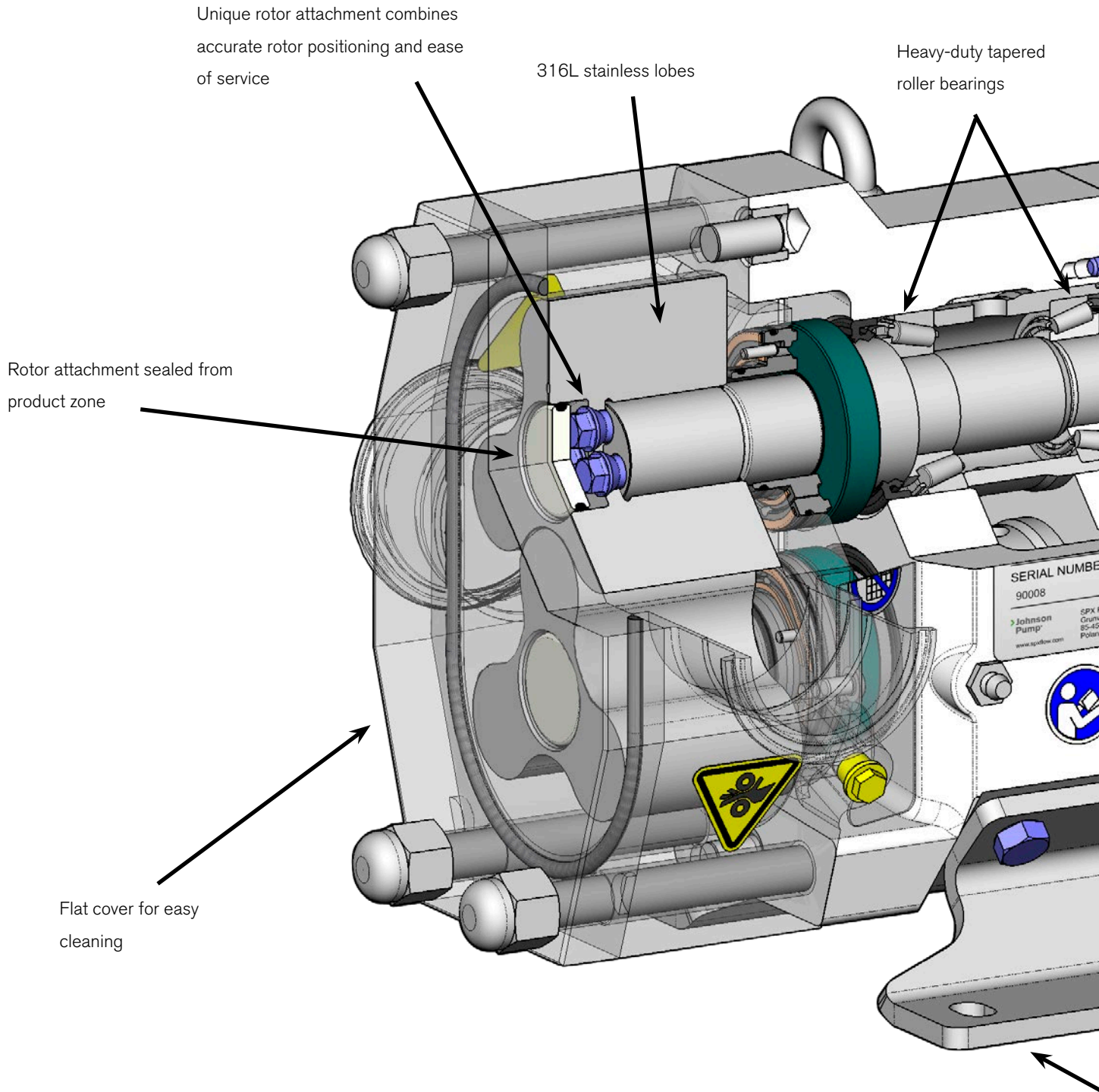
### PHARMACEUTICAL

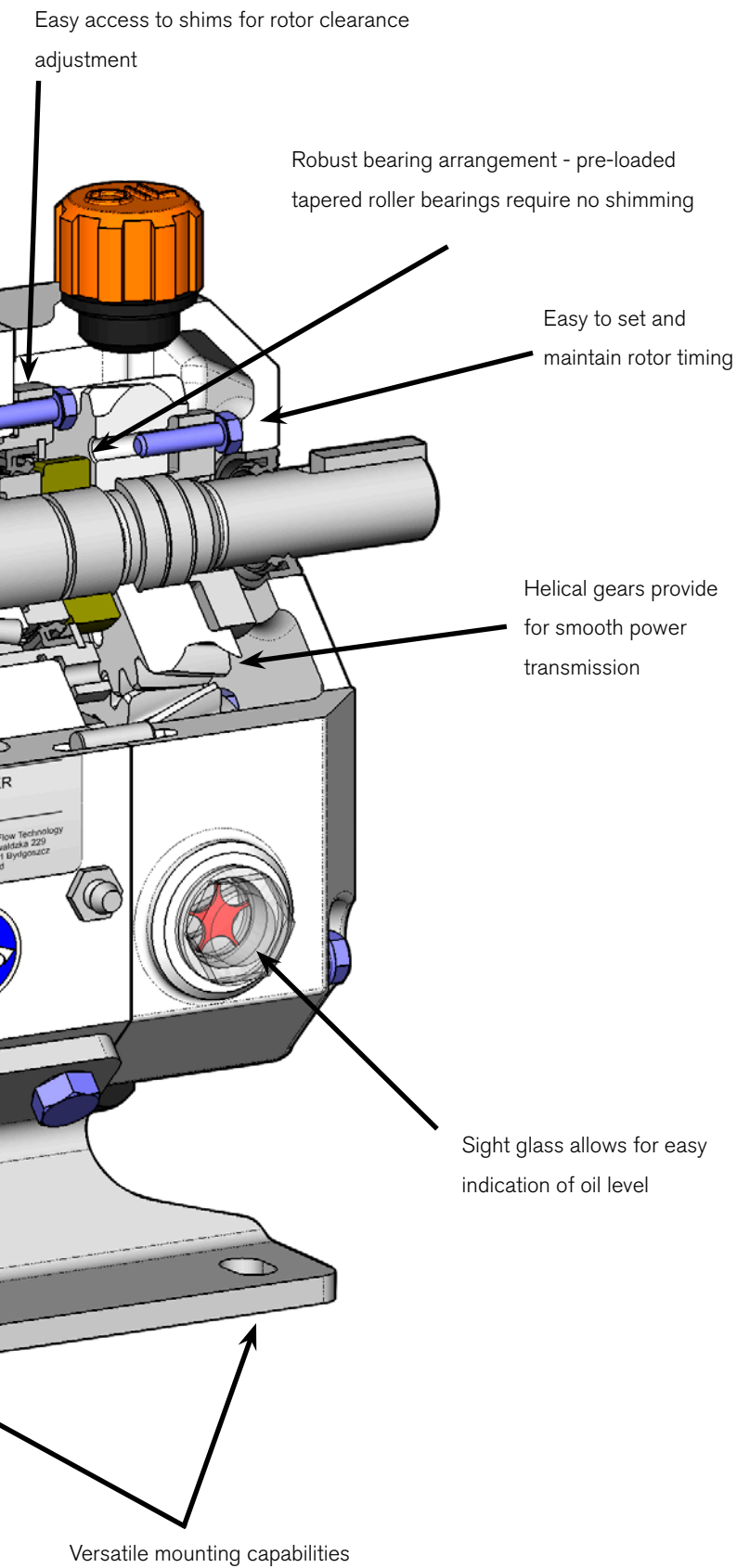
Pill Pastes; Syrups; Extracts; Emulsions; Slurries

### CHEMICAL/INDUSTRIAL

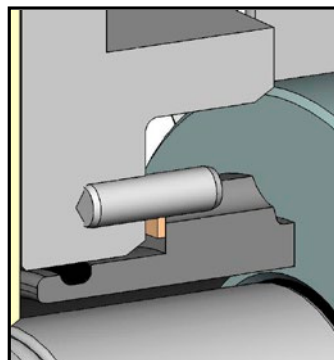
Solvents; Fuels; Oils & Lubricants; Paints; Resins & Polymers; Soaps; Sludges

# Performance and long life through engineering





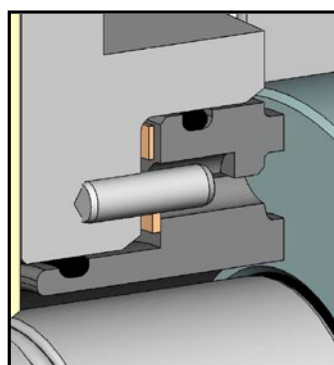
## Seal Options



### **SINGLE MECHANICAL SEAL\***

Standard carbon vs. hardened stainless steel faces provides long life in most applications.

Optional silicon carbide vs. silicon carbide adds protection against abrasive wear.



### **DOUBLE CONCENTRIC MECHANICAL SEAL\***

Used with flushing fluid to cool, lubricate, and rinse away residue. Best arrangement for severe service.

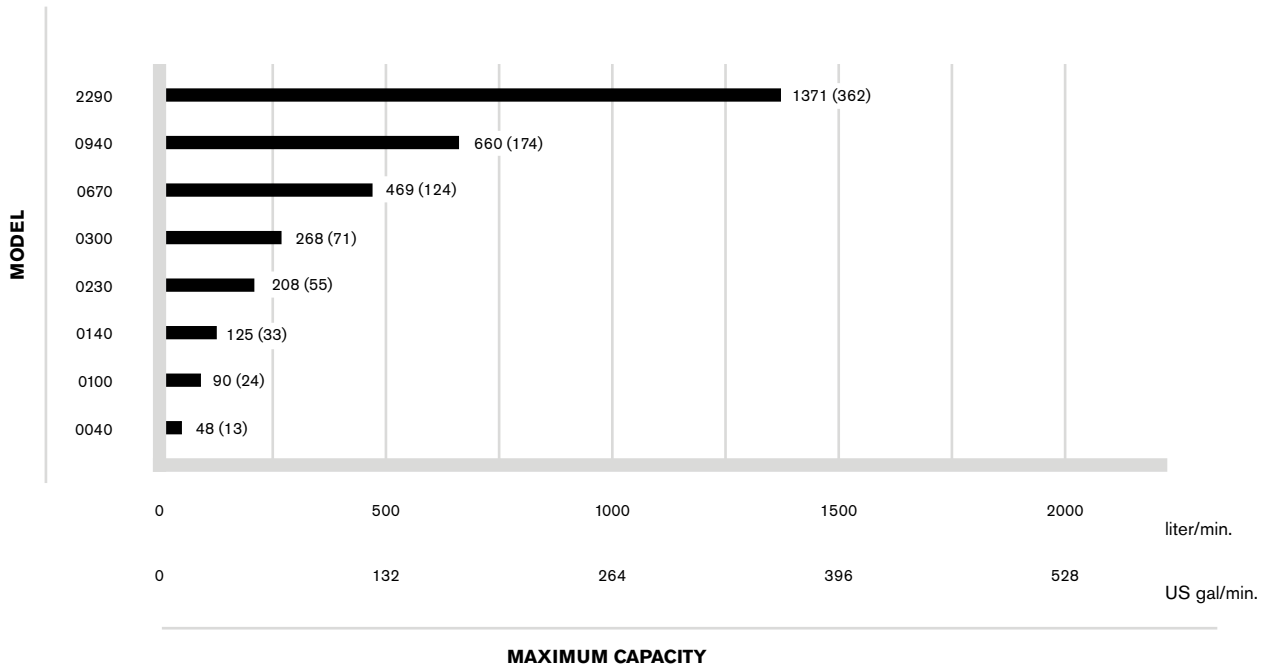
### **ELASTOMER CHOICES FOR "O" RINGS:**

- Fluoroelastomer (FKM)
- EPDM

### **\*MECHANICAL SEAL MATERIAL OPTION:**

- Carbon vs. Hardened Stainless Steel
- Silicon Carbide vs. Silicon Carbide

## Performance overview

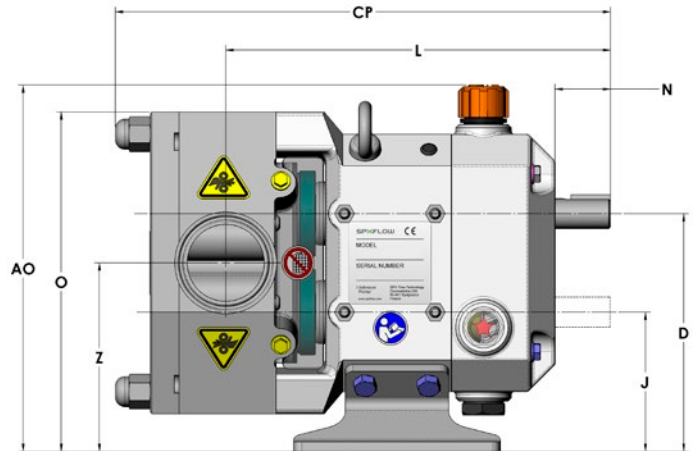
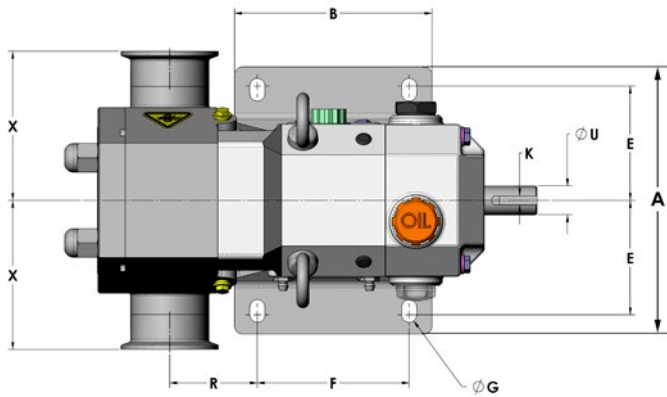


## Technical data

| MODEL | DISPLACEMENT<br>LITER/REV | NOMINAL<br>CONNECTION<br>SIZE | DIFFERENTIAL<br>PRESSURE RATING<br>BAR | MAXIMUM<br>PUMP SPEED<br>RPM | INPUT SHAFT<br>DIAMETER<br>(MM) | MAXIMUM<br>TORQUE<br>N-M |
|-------|---------------------------|-------------------------------|--|------------------------------|---------------------------------|--------------------------|
| 0040  | 0.04                      | 25 (1")                       | 10                                     | 1200                         | 19                              | 108                      |
| 0100  | 0.10                      | 25 (1")                       | 10                                     | 900                          | 19                              | 108                      |
| 0140  | 0.14                      | 38 (1.5")                     | 10                                     | 900                          | 19                              | 108                      |
| 0230  | 0.23                      | 38 (1.5")                     | 10                                     | 900                          | 19                              | 108                      |
| 0300  | 0.30                      | 50 (2")                       | 10                                     | 900                          | 19                              | 108                      |
| 0670  | 0.67                      | 50 (2")                       | 10                                     | 700                          | 38                              | 400                      |
| 0940  | 0.94                      | 75 (3")                       | 10                                     | 700                          | 38                              | 400                      |
| 2290  | 2.29                      | 100 (4")                      | 10                                     | 600                          | 55                              | 1200                     |
| 3450  | 3.45                      | 150 (6")                      | 10                                     | 600                          | 55                              | 1200                     |



## Dimensions



Dimensions are shown in mm

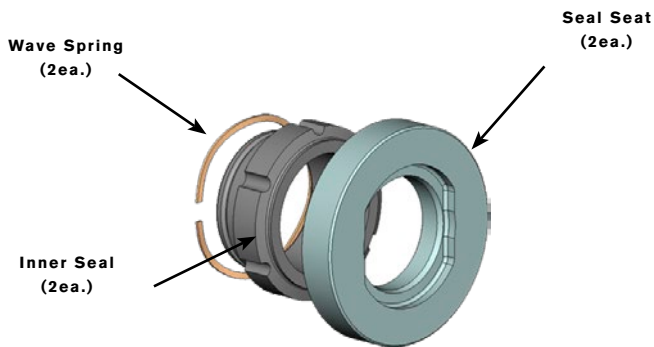
| MODEL | A     | AO    | B     | CP    | D     | E     | F     | G  |
|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 0040  | 175.5 | 230.5 | 130.0 | 281.4 | 149.6 | 72.8  | 100.0 | 10 |
| 0100  | 175.5 | 230.5 | 130.0 | 286.8 | 149.6 | 72.8  | 100.0 | 10 |
| 0140  | 175.5 | 230.5 | 130.0 | 298.7 | 149.6 | 72.8  | 100.0 | 10 |
| 0230  | 175.5 | 230.5 | 130.0 | 299.1 | 149.6 | 72.8  | 100.0 | 10 |
| 0300  | 175.5 | 230.5 | 130.0 | 311.1 | 149.6 | 72.8  | 100.0 | 10 |
| 0670  | 239.1 | 310.6 | 160.0 | 396.4 | 205.9 | 99.5  | 120.0 | 13 |
| 0940  | 239.1 | 310.6 | 160.0 | 423.9 | 205.9 | 99.5  | 120.0 | 13 |
| 2290  | 301.1 | 384.6 | 250.0 | 553.6 | 263.7 | 130.5 | 210.0 | 13 |
| 3450  | 301.1 | 384.6 | 250.0 | 605.6 | 263.7 | 130.5 | 210.0 | 13 |

| MODEL | J     | K     | L     | N    | O     | R     | U  | X     | Z     |
|-------|-------|-------|-------|------|-------|-------|----|-------|-------|
| 0040  | 87.6  | 6X6   | 227.6 | 34.7 | 231.6 | 43.5  | 19 | 98.0  | 118.6 |
| 0100  | 87.6  | 6X6   | 229.0 | 34.7 | 231.6 | 44.9  | 19 | 98.0  | 118.6 |
| 0140  | 87.6  | 6X6   | 235.8 | 34.7 | 231.6 | 51.7  | 19 | 98.0  | 118.6 |
| 0230  | 87.6  | 6X6   | 235.9 | 34.7 | 231.6 | 51.8  | 19 | 98.0  | 118.6 |
| 0300  | 87.6  | 6X6   | 241.8 | 34.7 | 231.6 | 57.7  | 19 | 98.0  | 118.6 |
| 0670  | 112.9 | 10X8  | 321.0 | 57.6 | 292.9 | 75.5  | 38 | 124.0 | 159.4 |
| 0940  | 112.9 | 10X8  | 332.6 | 57.6 | 292.9 | 87.1  | 38 | 134.0 | 159.4 |
| 2290  | 138.7 | 16X10 | 437.0 | 85.6 | 368.2 | 81.5  | 55 | 159.0 | 201.2 |
| 3450  | 138.7 | 16X10 | 463.2 | 85.6 | 368.2 | 107.7 | 55 | 159.0 | 201.2 |

## Service Parts Kits

**SERVICE KITS AVAILABLE FOR RAPID REPLACEMENT OF ROUTINE SERVICE ITEMS:**

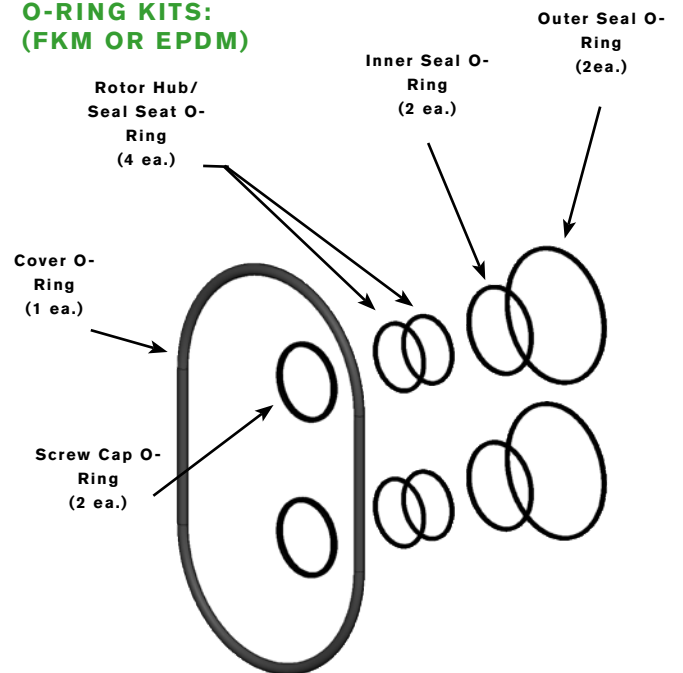
### PRODUCT SEAL KIT: (STANDARD AND SILICON CARBIDE)



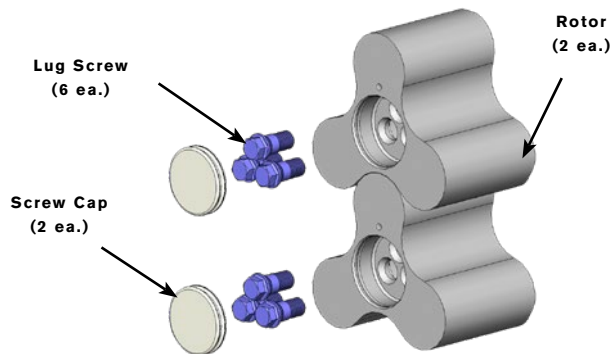
### DOUBLE SEAL KIT:



### O-RING KITS: (FKM OR EPDM)



### ROTOR REPLACEMENT KIT:



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