

## TLP Series

SANITARY ROTARY LOBE PUMP



> Johnson Pump®

For more than half a century, SPX has been a leader in the design, manufacture and application of positive displacement pumps. SPX 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 PD pumps are in thousands of challenging sanitary, chemical and industrial applications around the world.

Based in Charlotte, North Carolina, SPX
Corporation (NYSE: SPW) is a global Fortune
500 multi-industry manufacturing leader. For
more information, please visit www.spx.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 flexibiltiy
- 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

# 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/LNDUSTRIAL

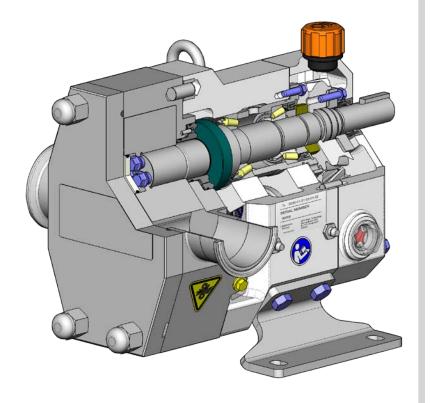
Solvents; Fuels; Oils & Lubricants; Paints; Resins & Polymers; Soaps; Sludges



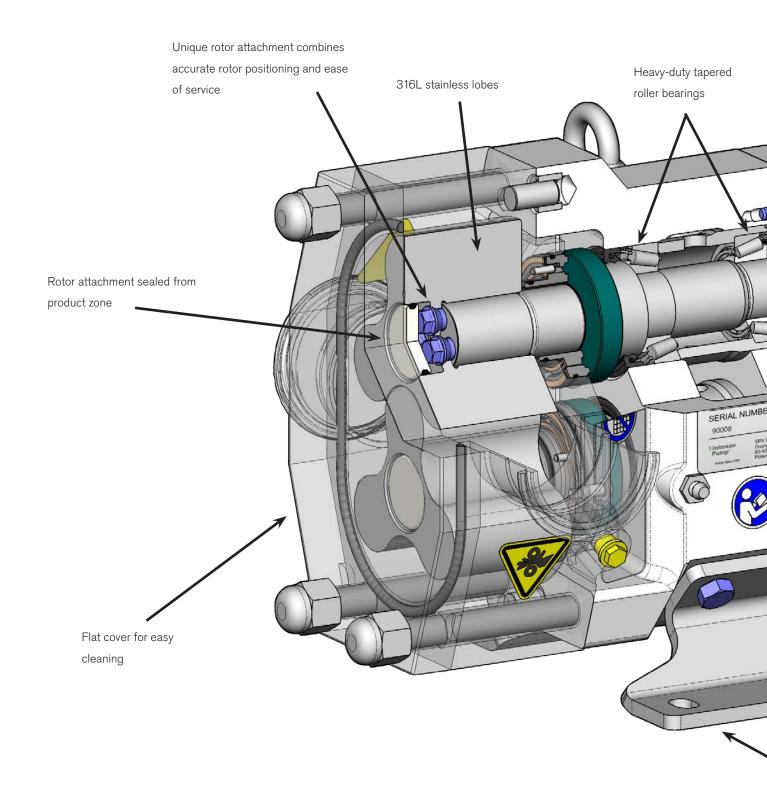


### **PRODUCT BENEFITS**

- 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

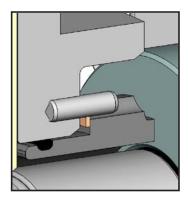


### Performance and long life through engineering



# Easy access to shims for rotor clearance adjustment Robust bearing arrangement - pre-loaded tapered roller bearings require no shimming Easy to set and maintain rotor timing Helical gears provide for smooth power transmission Sight glass allows for easy indication of oil level Versatile mounting capabilities

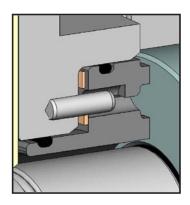
### Seal Options



### 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.

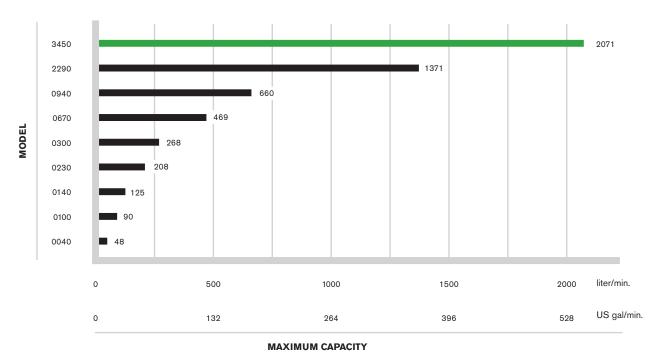
### **ELASTOMER CHOICES FOR "O" RINGS:**

- Fluoroelastomer (FKM)
- EPDM

### \*MECHANICAL SEAL MATERIAL OPTION:

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

### Performance overview

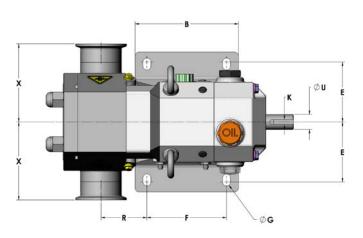


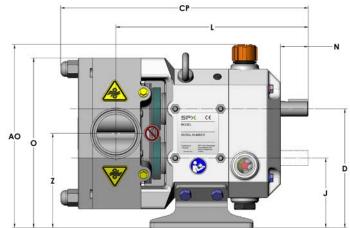
### Technical data

MODEL	DISPLACEMENT LITER/REV	NOMINAL CONNECTION SIZE	DIFFERENTIAL PRESSURE RATING BAR	MAXIMUM PUMP SPEED RPM	INPUT SHAFT DIAMETER (MM)	MAXIMUM TORQUE 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	А	АО	В	СР	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	1	К	L	N	o	R	U	х	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

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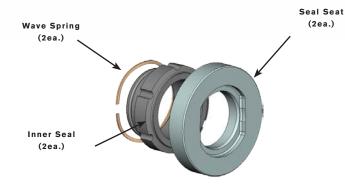


Sanitary Rotary Lobe Pump

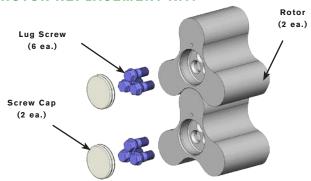
### Service Parts Kits

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

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



### **ROTOR REPLACEMENT KIT:**



#### SPX FLOW TECHNOLOGY POLAND SP. Z O.O.

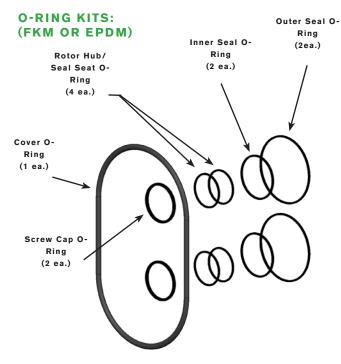
Hermana Frankego 9, PL 85-862 Bydgoszcz, Poland www.spx.com • www.johnson-pump.com

P: +48 52 5259 900

F: +48 52 5259 909

E: ft.bydgoszcz.office@spx.com





Local contact:

http://global.johnson-pump.com/JPIndustry/SPX-johnson-pump-industry-distributors.html

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