

## **FLEX-I-LINER<sup>®</sup>** *Thermoplastic* **SEALLESS, SELF-PRIMING PUMPS**



Compact, portable, close-coupled Flex-I-Liner<sup>®</sup> pump with totally enclosed electric motor.

- TEFLON ■ POLYPROPYLENE ■ POLYETHYLENE
- NO STUFFING BOXES, NO VALVES, NO GASKETS
- DRY RUNNING ■ REVERSIBLE OPERATION

Flows to 40 gpm (9m<sup>3</sup>/hr.)  
Pressures to 45 psig (310kPa)  
Temperatures to 250°F (121°C)

Flexi-I-Liner<sup>®</sup> peristaltic type rotary pumps are engineered for dependable, leakproof handling of acids, caustics, salts, abrasive slurries, solvents, chlorides, and other clear or viscous fluids, even those containing soft solids. These nonmetallic pumps operate in either direction, wet or dry, and in any position. Their gentle pumping action minimizes foaming, prevents settling out of suspensions and permits safe handling of latex emulsions and other shear-sensitive liquids. Designed without stuffing boxes, glands, shaft seals or internal valves, there is no danger of

external leakage. Only two components are in contact with the fluid — the inner surface of the plastic pump body and the outer surface of the rugged replaceable elastomeric flexible liner. This easy-to-service construction keeps maintenance and downtime to a minimum. More than 175,000 of these dependable sealless, self-priming pumps are in service handling aggressive and other problem fluids.



Pedestal-mounted Flex-I-Liner<sup>®</sup> models are available with standard or variable-speed electric motors, air motor drives, or pulley-driven configurations.

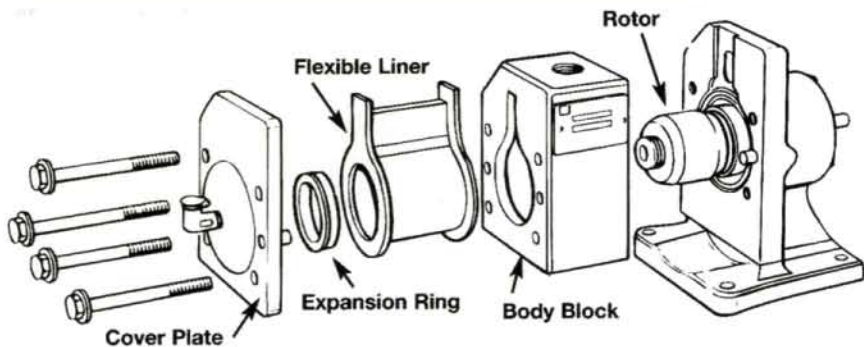
Only these two (2) nonmetallic components contact the fluid being pumped.



Replaceable elastomeric liners molded from a wide selection of chemically resistant materials.

Body blocks of Teflon, polypropylene or polyethylene.

# FLEX-I-LINER® THERMOPLASTIC SEALLESS, SELF-PRIMING PUMPS



## UNIQUE DESIGN AND CONSTRUCTION MEANS TROUBLE-FREE OPERATION AND LOW MAINTENANCE

A rotor mounted on an eccentric shaft oscillates within the flexible liner, creating a progressive squeegee action on the fluid trapped in the channel between the liner and the body block. Flanges on the flexible liner are pressed to the sides of the body block by concentric grooves on the pedestal assembly and the cover plate. This serves to isolate the fluid to the channel. Pump models are available close-coupled or pedestal-mounted to an electric motor, or air-powered for handling volatile fluids.

Flex-I-Liner pumps are available in duplex configuration with manifolds providing common suction and discharge connections, and in sanitary design with flame-polished interiors and quick-disconnect fittings. These pumps are ideally suited for use on a variety of stationary and mobile acid buggies for the transfer of chemicals in laboratory and plant operations, as well as for incorporation on OEM equipment.

The wide choice of thermoplastics and elastomers in which these pumps are furnished permits their use over the full pH range and for an endless list of corrosive and abrasive clear and viscous fluids. Although published data for specific chemicals are available, the most reliable guide to material selection for those difficult-to-pump applications is Vanton's sixty plus years of experience.

BODY BLOCK	MATERIALS		TEMPERATURE RANGE
	"P" series	Polyethylene (UHMW)	Up to 225°F
"PY" series	Polypropylene	Up to 185°F	
"TE" series	Teflon*	Limited only by liner material	
FLEXIBLE LINER	Buna N	Up to 185°F intermittent to 200°F	
	Neoprene	Up to 185°F	
	Hypalon* (Chlorosulfonated Polyethylene)	Up to 210°F	
	Butyl	Up to 225°F	
	Viton*	Up to 250°	
	Nordel*	Up to 225°F	

\*Trademark DuPont Company

## SPECIFICATIONS

1. Pump bodies are provided in Teflon, polypropylene, UHMW (ultra high molecular weight) polyethylene, and other nonmetallic materials. Stainless steel body available on request.
2. The heavy duty replaceable flexible liners are available in a wide choice of chemically resistant natural and synthetic elastomeric materials, including natural rubber, neoprene, Buna N, Hypalon, Viton and Nordel.
3. Field replacement of the precision molded flexible liners is accomplished without the use of special tooling.
4. The design eliminates stuffing boxes, glands, shaft seals, gaskets or internal valves.
5. The pump is self-priming and capable of running dry.
6. Shaft and rotor bearings are completely isolated from the fluid cavity, eliminating any danger of corrosion, or contamination of the fluid being pumped.
7. Pumps are suitable for vacuum and gas sampling service, for handling volatile liquids, viscous fluids and slurries, even those with soft solids.



Rotor on eccentric shaft



Air-driven model



Variable speed drive



Duplex model

SIZE	CAPACITY G.P.M. H <sub>2</sub> O at 70°F at 0 P.S.I.	OPERATING PRESSURE RANGE P.S.I.G.		H.P.	R.P.M.	HOSE CONNEC- TIONS*
		INTER- MITTENT	CON- TINUOUS			
2	0.33	0-25	0-25	1/4	1750	3/8"
6	1.0	0-25	0-25	1/4	1750	3/8"
12	2.0	0-35	0-30	1/4	1750	3/8"
18	3.0	0-40	0-30	1/4	1750	3/8"
30	5.0	0-45	0-30	1/4	1750	1"
60	10.0	0-50	0-30	1/2	1750	1"
90	15.0	0-15	0-10	1	1200	1 1/2"
120	20.0	0-15	0-10	1	1200	1 1/2"
180	30.0	0-30	0-30	1-1 1/2	1750	2"
240	40.0	0-30	0-30	1-1 1/2	1750	2"

\* Hose connections generally recommended. Other types available.

‡ 1 1/4" suction, 1" discharge

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