# LE-24 LIQUID HANDLING ASSEMBLY

For Series D With 3.0 Liquifram

### CAUTION

When pumping chemicals, make certain that all tubing is securely attached to the fittings. It is recommended that tubing or pipe lines be shielded to prevent possible injury in case of rupture or accidental damage. Always wear protective clothing and face shield when working on or near metering pump.

### MATERIALS OF CONSTRUCTION

Fittings PVC
Seal Rings Teflon
Balls Ceramic
Head PVC
Liquifram Teflon Face
Suction 1/2" NPT Male
Discharge 1/2" NPT Male

## A. INSTALLING INJECTION CHECK VALVE

- 1. The injection check valve should always be installed as close as possible to the point of solution injection.
- 2. Purpose of injection check valve is to prevent backflow from *treated line* and to prevent syphoning or over pumping of solution.
- 3. A 1/2" NPT female fitting with sufficient depth will accept the injection check valve.

## **B. CONNECTING DISCHARGE PIPE**

NOTE: Corrosion resistant 1/2" Schedule 80 or Schedule 120 should be used. Do not use 1/4" pipe.

1. Discharge valve has 1/2" NPT male outlet. A 1/2" NPT union should be connected to both discharge and suction valves so that metering pump may be removed without disturbing piping.

It is recommended that Teflon tape be used on tapered pipe threads so that there is a leakproof seal without overtightening of fittings.

## C. CONNECTING SUCTION PIPE

- 1. Using the same size and material pipe as used on discharge line, cut suction pipe to required length.
- 2. Use of Teflon tape on tapered pipe threads is again highly recommended, to be sure connections are leak-proof. Suction side leads are invisible but if a leak is present pump will suck in air during each suction stroke.
- 3. Maximum recommended vertical suction lift is 5 ft. (1.5m).

## D. PRIMING

- 1. Temporarily loosen the union on top of discharge valve.
- 2. Start pump and set pump at near maximum (80%) speed and 100% stroke.

"D" series stroke cannot be adjusted until pump is operating electrically. Turn lower knob while unit is stroking.

- 3. As soon as solution begins to leak at the union on top of discharge valve, stop the pump.
- 4. Pump is now primed.
- 5. Tighten union on top of discharge valve.



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#### NOTE:

Threaded connections into pump head are 1"-12 straight threads. Do not use Tetion tape. These joints are sealed by seal ring valve seats (item 6 on exploded view).

KEY	PART		
NO.	NO,	DESCRIPTION	QTY.
1	26716	Injection Check/Back Press. Valve	1
2	25108	Injector Fitting, PVC	1
3	10339*	Spring, PVDF	1
4	10138*	Ball, Ceramic .500	4
6	25128*	Seal Ring, Teflon	4
7	26001	Valve Seat, PVC 1.2" NPT	2
10	26017	Head Assembly, LE-24	1
11	26019	Discharge Valve Assembly	1
12	26024	Valve Housing, PVC 1/2" NPT	2
13	26020	Suction Valve Assembly	1
14	-10040#	Screw, 10-24 x 3/4" S.S.	4
15	_10525^	Head, 3.0 SI, PVC	1
16	25319*	Liquifram ™, 3.0 Si, Tefion Face	1
18	26021	Foot Valve Assembly	1
20	25600	Foot Valve Seat, Polypropylene	1
21	10123	Strainer	1

30856 10525M

- Parts included in Spare Parts Kit No SP-U5
- # For use with LMI Series M Metering Pumps, Order 4 ea. 31112, Screw, 10/24 x 1.5" SS
- + Included SURO #30856

