

LE 28

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 of accidental damage. Always wear protective clothing when working on or near chemical metering pump.

MATERIAL

Fittings	Polypropylene/Brass/ Nickel Plated Aluminum
Seal Rings	Teflon
Balls	316 S.S.
Head	Nickel Plated Aluminum
Liquifram	Teflon Face
Suction	3/4" NPT
Discharge	1/2" OD Polyethylene

A. PLATFORM OR FLOOR MOUNT

1. The 28 Liquid End is designed for flooded suction (to pump non-corrosive viscous liquids).
2. It is essential to locate pump below and as near as practical to the source of liquid to be pumped.
3. Flexible tubing of 3/4" ID or rigid piping of at least 3/4" NPT should be used on suction line.
4. Install gate valve or ball valve with clear way diameter at least as large as suction line piping. This is necessary to stop flow from positive suction head in source tank while servicing pump.
5. When connecting suction coupling to pump, make sure gasket supplied with pump is installed as shown on exploded view diagram.

B. DRUM BUNG MOUNT

1. Pump may be used to connect directly to small bung of 50 gallon barrel.
2. Stand barrel upright. Install 3/4" NPT nipple and 3/4" NPT valve with 3/4" clear way in small bung.
3. Close valve.
4. With barrel tipper, tip barrel so barrel is horizontal, with valve at lowest point.
5. Install coupling supplied with pump to valve.
6. Connect pump to coupling using gasket provided.
7. Provide means to support pump so pump weight does not hang from barrel bung.
8. Provide means to vent barrel to atmosphere.

C. CONNECTING DISCHARGE TUBING

1. Make sure tubing is cut off square.
2. Slide coupling nut onto tubing.
3. Push tubing over tapered nozzle of pump discharge valve so that tubing flares and reaches shoulder (if tubing is stiff from cold, dip end in hot water).
4. Slide coupling nut down until threads are engaged. While tightening coupling nut by hand, maintain pressure on tubing towards valve nozzle until tubing is held securely in place.
5. Install discharge connector or other suitable means to anchor discharge tubing at discharge point.
6. Route tubing from pump to discharge point making sure it does not touch hot or sharp surfaces and does not kink.

*Excessive force will crack or distort fittings.
DO NOT USE PIPE WRENCH.*

D. PRIMING

1. Open valve in suction line.
2. Set pump at 50% speed and 100% stroke. Start pump.
3. If sufficient positive suction head is available to overcome spring load on valves, pump will prime in a few minutes.
4. If insufficient positive suction head exists apply suction to discharge tubing by means of suitable vacuum sources, such as hand suction. Pump until liquid is visible in discharge tubing.
5. After air is expelled from head, adjust discharge rate to desired amount using longest stroke and slowest speed practical.



LIQUID METRONICS INCORPORATED

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Ref. No.	Part No.	Description	Quantity
1	25191	Head Assembly	1
2	10802	Discharge Valve Assembly	1
3	10411	Coupling Nut, Polypropylene	2
4	25173	Discharge Valve Housing	1
5	25042	Ball, 316 S.S.	2
7	25128	Seal Ring, Teflon	2
8	25189	Head, Nickel Plated Aluminum	1
9	25319	Liquifram, 3.0 SI., Teflon Face	1
10	10340	Screw, 10-24 x 3/4" S.S.	4
11	10803	Suction Valve Assembly	1
12	10271	Adapter, Nickel Plated Aluminum	1
13	10272	Ball Guide, Polypropylene	1
14	10762	Spring, S.S.	2
15	10578-1	Coupling, Nickel Plated Brass	1
16	10804	Connector Assembly	1
17	25442	Connector	1
18	10142	Tubing, Polyethylene	10 ft.

