

## SPECIFICATIONS -

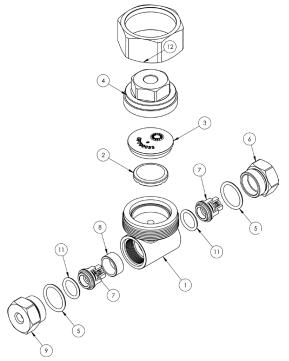
Part Number		100906
Max Pressure		1,500 PSI
Max Flow		.75 GPM
Port Sizes	Inlet:	1/8"-27 NPT-F
	Outlet:	1/8"-27 NPT-F
	Pulse Port:	1/4" NPT-F
Dimensions		2.8" x 2.6" x 2.4"
Weight		2.0 lbs
Materials		303 Stainless Steel

\*Flow will vary according to flow and pressure of the drive pump. For optimum performance, inlet pressure to the drive pump should be zero or negative but not to exceed drive pump specifications.

## FEATURES •

- 303 Stainless Steel body
- EPDM diaphragm offers resilience and chemical compatibility
- · Mounts to one of the drive pump inlet valve ports by using a special valve adapter
- Draws cleaning solution with each stroke of the drive pump
- Permits cleaning solution application at system pressure up to 1500 PSI
- · New union style allows replacement of diaphragm without removing plumbing

## PARTS LIST I



No.	Part No.	Description	Qty.
1	520381	Body, Pulse Pump	1
2	660180	Plastic Disc	1
3	700033	Rubber Diaphragm	1
4	520192	Top Cover Inlet, Pulse Pump	1
5	701004	O-ring, .70 DURO, Buna-N	2
6	520195	Valve Cap, 303 SST	1
7	103162	Assy., Valve Kit, Chem Pulse Pump	2
8	520194	Spacer Ring, 303 SST	1
9	520196	Valve Cap, 303 SST	1
11	701114	O-ring, 70 Duro, Buna-B	2
12	520338	Nut, Pulse Pump, 303 SS	1

#### VALVES & ADAPTERS■

PUMP SERIES	ADAPTER FITTING	VALVE ASSEMBLY
53 (ET)*	101157	103164
60 (TC)	520222	103036
44 (EZ)	520197	103036
63 (TX)	520197	103036
47(HTS)	520190	103035
66 (TSF)	520223	103090
310/3CP/5CP2 (Cat)	520279	N/A
5CP3/5CP5 (Cat)	520341	N/A
5CP6 (Cat)	520342	N/A

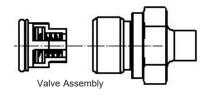
\*53 series pumps require a tapped valve plate. For HR coated plate, use K423, for brass plate use K424.

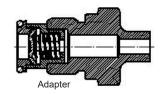
#### **INSTALLATION INSTRUCTIONS**

From the drive pump remove one of the standard inlet valve plugs and it's valve assembly and install the special valve assembly with a through hole in the plastic cage and install the special adapter with a 3/8" NPT Male threads that is appropriate for the drive pump and tighten to proper torque. Thread the pulse pump pulse port 1/4"-18 NPT Female onto the special adapter 1/4"-18 NPT Male and tighten until the pulse pump inlet and outlet ports are at desired position. Install pulse pump inlet and outlet according to diagram.





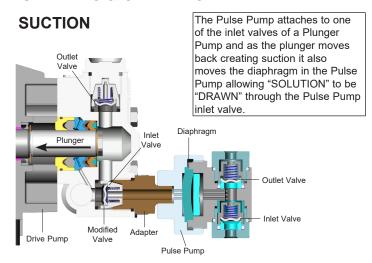




Ref 300625 Rev. F

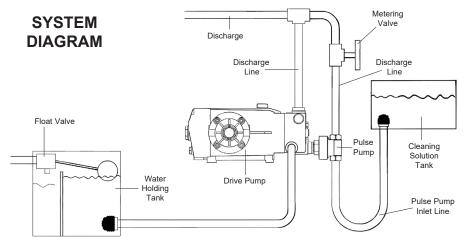


## **CUTAWAYS & OPERATION**



# When the Pump Plunger moves **DISCHARGE** Forward it also moves the Diaphragm in the Pulse Pump allowing "SOLUTION" to be "PUMPED" through the Pulse Pump outlet valve Outlet Diaphragm Plunger Outlet Valve Modified

Pulse Pump



Pulse Pump will not draw cleaning solution with a pressurized inlet to the drive pump. For optimum performance inlet pressure to the drive pump should be zero or negative but not to exceed drive pump specifications.

To adjust the amount of cleaning solution drawn into the system, install a metering valve in the discharge line of the pulse pump.

The pressure limit of 1500 PSI is due to the diaphragm.

#### START-UP INSTRUCTIONS

With the drive pump open and pulse pump metering valve open (no back pressure), start drive pump. After water starts to flow from system check to be sure the pulse pump is primed and pumping. Then install nozzle and set drive pump pressure to desired discharge pressure. After the unit is operating, adjust metering valve to obtain desired water/cleaning solution ratio.

Mixing ratio varies with output of drive pump.

### TROUBLESHOOTING I

No cleaning solution supply from Pulse Pump:

- System not primed Airlock between drive pump and pulse pump diaphragm Airlock in pulse pump inlet line
- Failure of diaphragm
- Foreign material in Pulse Pump inlet and outlet valve

Limited cleaning solution supply from Pulse Pump:

- Restriction between drive pump and pulse pump
- Restriction in metering valve
- Worn inlet and outlet valves

