not to exceed drive pump specifications

Max. Pressure w/ Ball Valve Closed

**Pulse Port** 

1/8"-27 NPT-F 1/8"-27 NPT-F 3/8" NPT-F

**Dimensions** 3" x 3.55" x 4.42"

3.0 lbs. Weight

Pulse-Actuated Chemical Pump, With Ball Valve

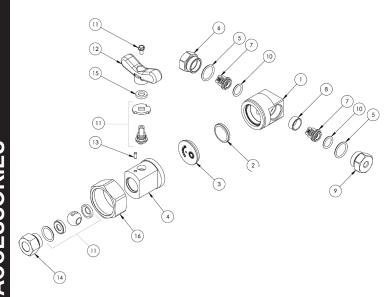
**Materials** 303 Stainless Steel \*Flow will vary according to flow and pressure of the drive pump. For optimum

performance inlet pressure to the drive pump should be zero or negative but

### **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
- Integrated ball valve allows shut-off when using water pressure up to 3000 PSI
- New union style allows replacement of diaphragm without removing plumbing

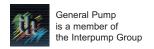
# **PARTS LIST**



No.	Part Number	Description	Qty.
1.	520193	Body, Pulse Pump	1
2.	660180	Plastic Disc	1
3.	700033	Rubber Diaphragm	1
4.	520270	Pulse Pump, Top w/Ball Valve	1
5.	701004	O-ring, .862 x .103	2
6.	520195	Valve Cap, Discharge	1
7.	103162	Assembly, Valve Kit	2
8.	520194	Spacer Ring	1
9.	520196	Valve Cap	1
10.	701114	O-ring, .612 x .103, 70 Duro, Buna-N	2
11.	190445	Ball Valve Kit, Pulse Pump	1
12.	450035	Handle, Pulse Pump	1
13.	520271	Pin, Stop, Pulse	1
14.	520269	Fitting, 3/8 NPT-FxM24x1.5	1
15.	701119	O-ring, SQ 7/16 IDx1/8 CS	1
16.	520338	Nut, Pulse Pump Union, 2"-16.33 SS	1

#### **VALVES & ADAPTERS**

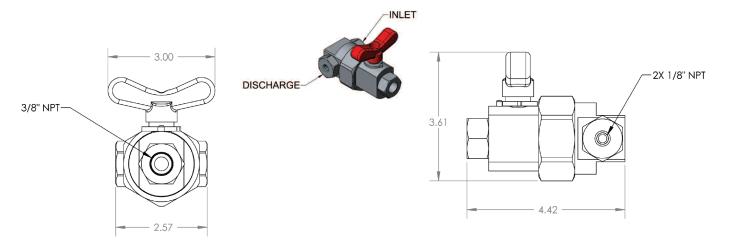
PUMP SERIES	ADAPTER FITTING	VALVE ASSEMBLY
60 (TC, HTC)	520275	103036
44 (EZ)	520273	103036
63 (TX, HTX)	520273	103036
47 (HTS)	520274	103035
66 (HTF)	520276	103090
Cat 310/3CP/5CP2	520282	N/A
Cat 5CP3/5CP5	520292	N/A
5CP6	520343	N/A





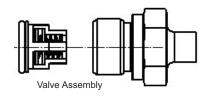


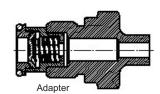
#### **DIMENSIONS**



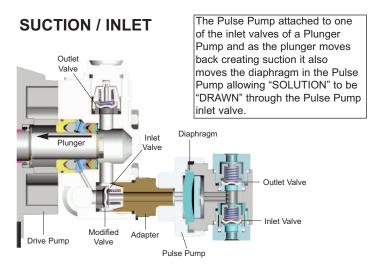
## **INSTALLATION INSTRUCTIONS**

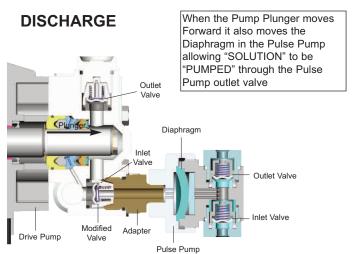
From the drive pump remove one of the standard inlet valve plugs and it's valve assembly and install the special valve assembly with a through hole in the plastic cage and install the special adapter with a 3/8"-18 NPT Male threads that is appropriate for the drive pump and tighten to proper torque.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



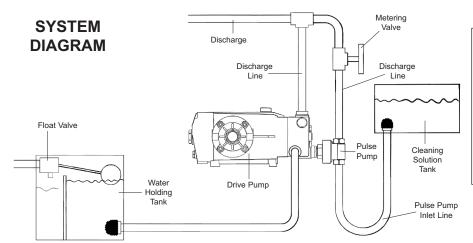


#### **CUTAWAYS & OPERATION**





### **CUTAWAYS & OPERATION**



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

Rev. B 04-12 GENERAL PUMP