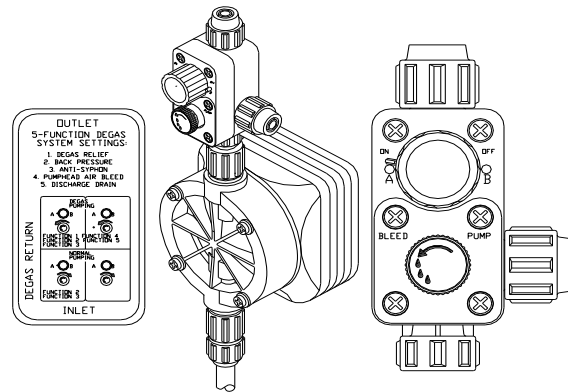


5-FUNCTION DEGAS VALVE INSTALLATION OPERATION MAINTENANCE INSTRUCTIONS



INSTALLATION:

1. **Tube Version:** Remove the tubing nut from the discharge valve cartridge on the top of the pump head. Install the supplied viton o-ring (#L1501200-VTN)* into the groove around the tubing tip on the valve cartridge. Hand-tighten the 5-function valve onto the discharge valve of the pump. Connect the discharge tubing to the “OUTLET” port and the bypass tubing to the “RETURN” port of the 5-function valve.

****PRESOAK TUBE:** Prior to assembly soak tube end in 180°F to Boiling Water (approx. the water temperature from the discharge of an office coffee maker). Soak time should be a minimum of 30 seconds.

2. **NPT Version:** Apply plumbers tape or sealant to the threads of the 5-function valve. Screw “INLET” connection into the discharge valve of the pump head. Connect piping to the “OUTLET” and “RETURN” port connections of the 5-function valve.

*If viton is not compatible with fluid being pumped and alternate teflon o-ring is available (L1501200-TFE). Viton is the preferred sealing material with difficult to seal fluids like Sodium Hypochlorite and similar

3. **Degas Function Setup:** To achieve the desired bypass flow of 1 to 10%, follow one of these two methods:

Non-primed pump: To prime the pump, turn the top knob to the left (labeled ON/A), and turn the bleed (bottom) knob fully counter-clockwise (bleed). Once fluid is seen at the side port, turn the top knob to the right (labeled OFF/B) and the bleed knob fully clockwise (pump). Now slowly open the bleed knob by turning it counter-clockwise until you see a small amount of fluid coming out of the side port (1-10% flow). The degas function is now set.

Primed Pump: With the pump running, slowly open the bleed (bottom) knob by turning it counter-clockwise (labeled bleed) until you see a small amount of fluid coming out of the side port (1-10% flow). The degas function is now set.

5-FUNCTION DEGAS VALVE OPERATIONS:

- 1. Degas Function:**
Designed to bypass gases and fluid during normal pump operation. The bypass feature allows for the constant removal of gases that would otherwise “air bind” the pump. A typical bypass flow would be 1-10% of pump output.
- 2. Back Pressure Function:**
The back pressure function allows the pump to meter to atmosphere by creating a discharge restriction of approximately 20psi. Back pressure is provided any time the top knob is turned to “A”, also labeled “ON” position. Note: The back pressure function is not intended to prevent flow-through from elevated supply tanks. The pump’s rated pressure does not have to be de-rated when the back pressure knob is in the “ON” position.
- 3. Anti-Siphon Function:**
The anti-siphon function prevents siphoning through the pump when pumping to a receptacle lower than the pump. This feature is active when the top knob is turned to the letter “A”, also labeled “ON” position.
- 4. Pump head Air Bleed Function:**
This function is used when starting the pump to aid in priming. It allows for removal of air from the pump head by bypassing air and fluid out the “RETURN” connection. This feature will function when the bottom knob is turned fully counter clockwise until it stops, also labeled “BLEED” position.
- 5. Discharge Drain Function:**
This function is used to depressurize and/or drain the pump discharge line. This is accomplished by turning the top knob to the “B”, also labeled “OFF” position, and the bottom knob fully counter clockwise until it stops, also labeled “BLEED” position. This will bypass the discharge line fluid through the “RETURN” line of the 5-Function/Degas Valve.

Maintenance: The only two maintenance items required are:

1. Replace the diaphragm whenever the pump head diaphragm is replaced. Sometimes when pumping dirty fluids, solids may become trapped between the PRV diaphragm (bottom one) and the PRV seat. This may cause the PRV to leak slightly. This is easily remedied by removing the diaphragm and wiping it with a cloth and reinstalling it. If the damage is excessive, the diaphragm must be replaced.
2. If the degas/bypass feature becomes plugged it may be necessary to soak the valve in water or a suitable fluid to dissolve solids. In extreme cases the .031in. (.79mm) diameter hole in the bleed valve body may have to be cleared.

5-FUNCTION DEGAS VALVE

SPECIFICATIONS:

Material of construction:

Valve body: **Polyvinylidene Fluoride (PVDF)**
 : **Polyvinyl Chloride (PVC)**

Diaphragm: **PTFE faced Hypalon**

O-rings: **Viton or Hypalon**

Hardware: **18-8 Stainless Steel (recessed)**

Maximum Pressure: **250-PSI**

Maximum Flow: **240-GPD**

Maximum Viscosity: **1000-CPS**

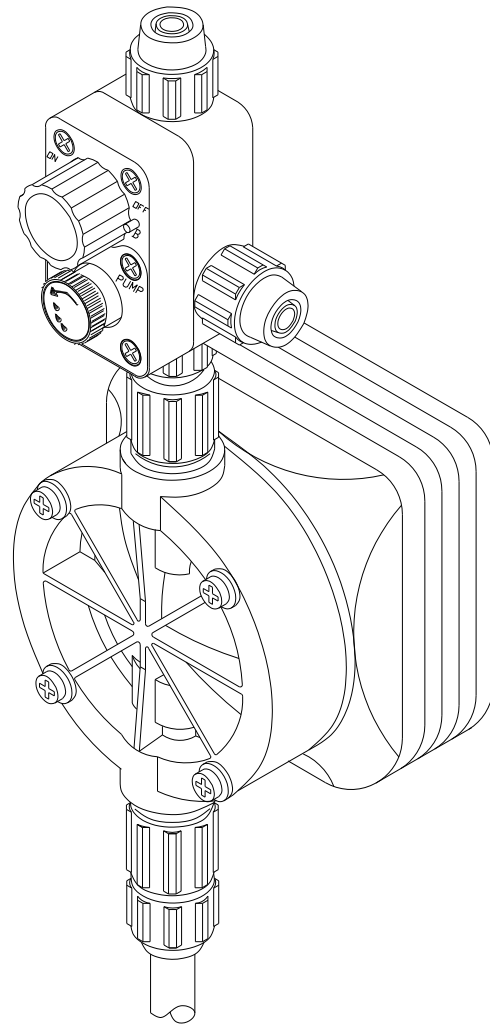
Note: Degas/bypass volume is adjustable, typically 1-10%.

Connections: **.25in NPT (male)**

.38in I.D. x .50in O.D. TUBING

.25in I.D. x .38in O.D. TUBING

G-1/2-A (metric)



METRIC TUBING COUPLING NUT KITS

4x6mm Tubing.....L9909100-HPV

4x10mm Tubing.....L9909200-HPV

6x10mm Tubing.....L9909201-HPV

6x12mm Tubing.....L9909300-HPV

10x14mm Tubing.....L9909400-HPV

10x16mm Tubing.....L9909401-HPV

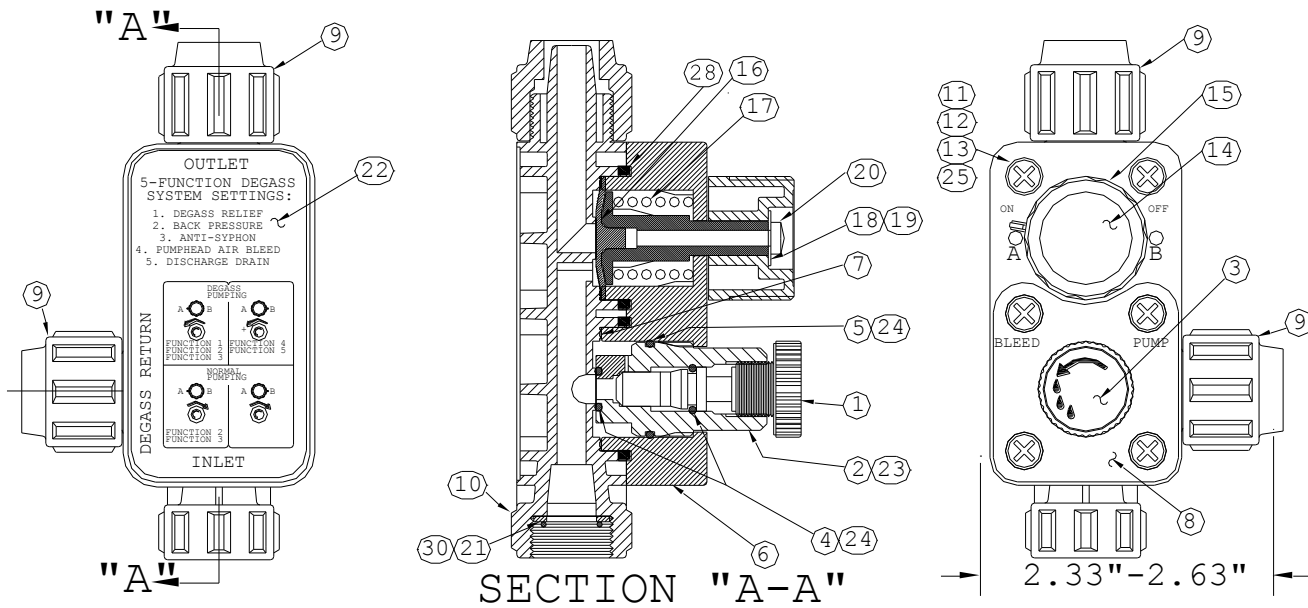
.38"-O.D.TUBING CONN.		4x6mm METRIC TUBING.	
MODEL #	VLV.BODY MATERIAL	MODEL #	VLV.BODY MATERIAL
L385KH01-PVD	PVDF	L385KH0P-PVD	PVDF
L385KV01-PVD	PVDF	L385KV0P-PVD	PVDF

.50"-O.D.TUBING CONN.		4x10mm METRIC TUBING.	
MODEL #	VLV.BODY MATERIAL	MODEL #	VLV.BODY MATERIAL
L385KH03-PVD	PVDF	L385KH0N-PVD	PVDF
L385KV03-PVD	PVDF	L385KV0N-PVD	PVDF

.25"-MALE NPT CONN.		10x14mm METRIC TUBING.	
MODEL #	VLV.BODY MATERIAL	MODEL #	VLV.BODY MATERIAL
L385KH02-PVD	PVDF	L385KH0Q-PVD	PVDF
L385KV02-PVD	PVDF	L385KV0Q-PVD	PVDF

6x10mm METRIC TUBING.		6x12mm METRIC TUBING.	
MODEL #	VLV.BODY MATERIAL	MODEL #	VLV.BODY MATERIAL
L385KH0S-PVD	PVDF	L385KH0Y-PVD	PVDF
L385KV0S-PVD	PVDF	L385KV0Y-PVD	PVDF

G-1/2-A METRIC PIPING		10x16mm METRIC TUBING.	
MODEL #	VLV.BODY MATERIAL	MODEL #	VLV.BODY MATERIAL
L385KH0R-PVD	PVDF	L385KH0W-PVD	PVDF
L385KV0R-PVD	PVDF	L385KV0W-PVD	PVDF
L385KH0M-PVD	PVDF		
L385KV0M-PVD	PVDF		



ITEM	PART #	DESCRIPTION	QTY
1	L1110200-PVD	SHAFT AS'Y, VALVE SCREW, 5-FUNCT/DEGAS	1
2	L1110000-PVD	ADAPTER(PVDF), CONVERSION VLV 5-FUNCT/DEGAS	1
3	L1701305-000	LABEL, DECAL BLEED SCREW	1
4	L1501100-HYP	O-RING(HYP), #2-010	1
	L1501100-VTN	O-RING(VTN), #2-010	1
5	W078200-HYP	O-RING(HYP), #2-018	2
	W078200-VTN	O-RING(VTN), #2-018	2
6	L1109900-PVD	BLOCK(PVDF), MODIFIED VLV 5-FUNCT/DEGAS	1
7	L1503300-HYP	GASKET(HYP), FLAT	1
	L1503300-VTN	GASKET(VTN), FLAT	1
8	L1713700-000	LABEL, BLEED/PUMP DECAL 5-FUNCT/DEGAS	1
9	L1100300-PVD	NUT(PVDF), COUPLING .38in.-TUBE	2
	L1100400-PVD	NUT(PVDF), COUPLING .50in.-TUBE	2
10	L1104000-PVD	BODY(PVDF), VALVE .38in.-TUBE 5-FUNCTION	1
	L1104100-PVD	BODY(PVDF), VALVE .50in.-TUBE 5-FUNCTION	1
	L1103900-PVD	BODY(PVDF), VALVE .25 NPT 5-FUNCTION	1
11	L9804700-188	SCREW(SST), #10-32 x1.5in.-lg. PHP	6
12	L9809700-188	NUT(SST), #10-32 x .25 thk. HEX	6
13	L9805001-000	WASHER(SST), #10-FLAT	6
14	L1701600-000	LABEL(BLK), STROKE LENGTH KNOB DECAL	1
15	L1900600-FPP	KNOB(FPP-BLK), ADJUSTMENT 5-FUNCT/DEGAS	1
16	L0301900-000	DIAPHRAGM AS'Y, 5-FUNCT/DEGAS VALVE	1
17	L1104600-000	SPRING, VALVE 150-PSI 5-FUNCT/DEGAS	1
18	L9904400-188	SPRING(SST), CURVED WASHER	1
19	L9804600-188	WASHER(SST), FLAT .19 x .56 5-FUNCT/DEGAS	1
20	06-008-26	SCREW(SST), #8 x 1.0in.-lg. TYPE-1	1
21	L1501200-TFE	GASKET(TFE), 2-013	1
22	L1713500-000	LABEL, INSTRUCTION DECAL 5-FUNCT/DEGAS	1
23	L9902100-188	PIN(SST), ROLL \U+2205.06x.63in.-lg.	2
24	L1110000-PVD	ADAPTER, CONVERSION VALVE 5-FUNCT/DEGAS	1
25	J00003	LUBE, SILICONE	A/R
26	L9407500-000	MANUAL, 5-FUNCTION/DEGAS	1
27	L1715xxx-000	LABEL, DECAL 5-FUNCTION/DEGAS	1
28	L1504100-000	O-RING, .989 X 1.121 X .066 VITON	2
30	J27903	GSK(TFE)..05X.455X.69	1

NOTES:

1. WHEN INSTALLING O-RINGS(IT.#20 & #21), LUBE WITH LUBE, SILICONE (IT.#26) TO PREVENT O-RING DAMAGE.
2. INSTALL CONVERSION VALVE ADAPTER(IT.#25) WITH SMALL BYPASS HOLE IN A VERTICAL POSITION TOWARDS TOP ADJ. KNOB(IT.#7).

