# **ACCUMULATOR TANK SPECIFICATION**

Total Volume: 8L

Temperature Range: 0~60°C Bladder Material: EPDM

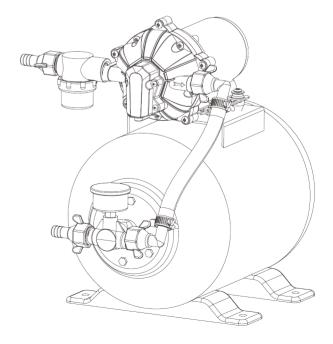
# SYSTEM SPECIFICATION

VOLTAGE	12V			24V		
Flow Rate	3GPM(030)	4GPM(040)	5GPM(050)	3GPM(030)	4GPM(040)	5GPM(050)
Amps Draw	10A	13A	17A	5.5A	7A	9A
Fuse	15A	20A	25A	8.5A	10.5A	13.5A
Pressure Switch	60PSI			60PSI		
Port	1/2"FNPT x 1/2"Barb			1/2"FNPT x 1/2"Barb		
Duty Cycle	continuous			continuous		
Ambient Temp. Range	0~60°C			0~60°C		
Tank Mounting Holes	1/2"Barb			1/2"Barb		
Wire Size	14 AWG			14 AWG		



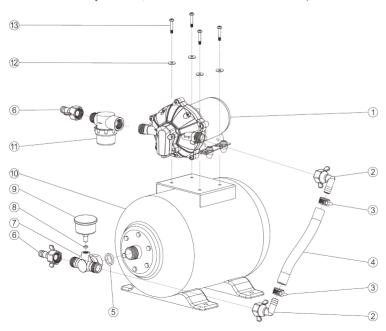
# **8L Accumulator Pressure Boost System**

INSTALLATION MANUAL -



## MOUNTING

- Whole system should be installed horizontally on a solid surface. Pump is mounted on top of tank.
- The pump needs to stay dry, it is not submersible. Avoid water splash on the system that may cause pump damage.
- Use high quality non-corrosive fittings **6**② and accessories **9**⑤ provided to extend system life.
- Install a ball valve at the inlet side 6 for emergency usage.
- Properly seal all connections to prevent unforeseen leaks.
- Install pressure gate ⑦ on top of the connector ⑤ to check the pressure inside the accumulator tank. Use Teflon tape or sealing compounds on pressure gate to avoid leaks, but, do not use them on fittings. Sealant that enters the pump may cause the system failure.
- Intake hose must be minimum 1/2" (13 mm) ID reinforced hose. Main distribution line from pump outlet should also be 1/2" (13 mm) ID.
- Plumb the system using high pressure (2x pump rating), braided, flexible tubing to minimize vibration/noise.
- Strainer (9) should be attached to the inlet side.
- The threaded fittings must be secured to avoid leakage. The threads are tapered, so as
  they are tightened, they form a seal. Tighten to a maximum torque of 3.7 ft lbs (5 Nm).
  Hand tighten only.
- Use clamps ③ at both ends of hose to prevent air leaks into the water line. (Outlet side
   ⑥ of the hose is already installed, users need to install the inlet side).



Key	Description	Key	Description	
1	NEW 51 Series Diaphragm pump	8	Seal Ring	
2	51 F03 Elbow Fitting	9	Pressure Gate	
3	Clamps	10	Accumulator Tank	
4	Hose	11	51 S01 Filter	
5	Seal Ring	12	Wearplate	
6	51 F01 Straight Fitting	13	Screw	
7	Connector			

#### **MAINTAINING**

Check the pressure inside the tank periodically.

# **CAUTION**

- Do not use rigid pipe on the inlet or outlet of the system. This may cause oscillation, and lead to noise and loosen or crack components.
- Do not adjust the pressure inside the tank.

## TO CHECK TANK AIR CHARGE

- Shutoff electric power to pump. Open faucet near tank, and drain completely.
- Check the precharge pressure with pressure gauge.
- Tank pressure should be 16~20PSI, check the precharge pressure, use compressor or portable air storage tank to add or bleed off the appropriate amount.
- Do not adjust the pressure above 87 psi.
- Use soap or liquid detergent on the connection part of the system to check for air leaks around the air valve. Continuous bubbling indicates a leak. If the bladder is leaking when tank is filled with water, replacement of tank is necessary.

## **ELECTRICAL WIRING**

- This pump should be wired on its own dedicated circuit. Connect the positive lead (red) to the positive terminal of your battery and the negative wire (black) to the negative terminal of your battery.
- In an easily accessible location, install a switch to control electricity to the pump. Turn
  the pump off when not used for extended periods or when the tank is empty.
- The electrical circuit should be protected with an over-current protection device (fuse) in the positive lead. This pump requires a 25 amp fuse.
- After installation, check the voltage at the pump motor. Voltage should be checked when pump is operating. Full voltage must be available at the pump motor at all times.

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