VEVOR

Upgrade · The Home Creator Way

DIAPHRAGM PUMP

MODEL: LSDPA1-040-050-33; LSDPA1-050-060-51;
LSDP1-040-045-33; LSDP1-050-070-42;
LSDP1-060-070-42; LSDP1-020-060-22;

VEVOR SUPPORT CENTER

LSDPA1-040-050-33	LSDPA1-050-060-51	LSDP1-040-045-33
LSDP1-050-070-42	LSDP1-060-070-42	LSDP1-020-060-22

	Warning-To reduce the risk of injury, user must read instructions manual carefully.
	This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)This device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.
	This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a wheelie bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to a collection point for recycling electrical and electronic devices

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DIAPHRAGM PUMP

	
LSDPA1-040-050-33 LSDP1-040-045-33	LSDPA1-050-060-51
	
LSDP1-050-070-42 LSDP1-060-070-42	LSDP1-020-060-22

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

WARNING

1. Avoid spraying water, exposure to rain, or submersion in water. Corrosive liquids and wastewater containing sand or silt must not be used.
2. If noise or vibration occurs: increase the valve or water pipe outlet, or completely shut it off. If intermittent vibration occurs, check for leaks in the piping.
3. If overheating or automatic shutdown occurs: increase the valve or water pipe outlet. The pump has overheat and overload protection features. Continuous high-pressure operation may cause overheating, and it will automatically stop when the threshold is exceeded. Do not worry; it will restart after cooling.
4. Minimum power requirements for battery and solar-powered operation (LSDPA1-040-050-33: 198W; LSDPA1-050-060-51: 281W; LSDP1-040-045-33: 156W; LSDP1-050-070-42: 192W; LSDP1-060-070-42: 204W; LSDP1-020-060-22: 72W).
5. May contain water carried over from factory testing.

Technical parameters

Model	VOLTS	Self-priming (ft)	Flow GPM(Lpm)	Pressure Switch Max psi (bar)	Bypass
LSDP1-040-045-33	12V DC	10	4.0(15)	50(3.4)	NO
LSDPA1-040-050-33	115V AC	10	4.0(15)	45(3.1)	NO
LSDP1-050-070-42	12VDC	12	5.0(18.9)	70(4.8)	YES
LSDP1-060-070-42	12VDC	12	6.0(22.7)	70(4.8)	YES
LSDPA1-050-060-51	115V AC	16	5.0(18.9)	60(4.1)	YES
LSDP1-020-060-22	12VDC	4	1.2(4.54)	80(5.9)	NO

- The product complies with relevant standards and regulations. Installation of this device must comply with all applicable regulations, and it should only be operated in well-ventilated areas. Please read the user manual before installing and using this equipment.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children shall not play with the appliance.
  This appliance shall not be used by children. Keep the appliance and its cord out of reach of children.
- Please use the product according to the intended use, warn of potential injury from misuse.
- Switch off the appliance and disconnect from supply before changing accessories or approaching parts that move in use.
  always disconnect the appliance from the supply if it is left unattended and before assembling, disassembling or cleaning nature of supply> <power / current of supply>
- To ensure drinking water hygiene, wash hands thoroughly and clean & disinfect relevant parts before installation, maintenance or contact with internal components.

- For first use or restart after long-term storage, flush the system sufficiently to remove foreign matter and odor before putting into service.
- Electrical connection must be done by a qualified electrician with reliable grounding. Do not touch power plug or terminals with wet hands to prevent electric shock.
- Do not run the pump dry without water, which may cause seal damage, overheating and fire risk.
- Install away from heat sources, flames and corrosive gases, avoid direct sunlight and rain to prevent aging, electric leakage and water contamination.
- Pump and motor may become hot during operation. Do not touch to

prevent burns.

- Keep children away from the unit to avoid drowning, electric shock and mechanical injury.
- Do not disassemble or modify safety devices or pump structure without authorization, to avoid leakage, malfunction or electric shock.
- Before servicing, moving or cleaning, disconnect power and drain residual water to prevent accidental starting and water spray injury.
- If abnormal noise, vibration, leakage, overheating or odor occurs, stop the pump immediately and troubleshoot before reuse.
- Inlet pipeline must be well sealed to avoid air intake and failure to prime, as well as prevent external contaminants from polluting water source.
- Inspect and maintain the pump and piping regularly to keep clean and prevent bacteria or algae growth that affects drinking water quality.
- This product is only for standard domestic drinking water systems. Not for medical, food processing or other special hygiene applications unless specifically marked suitable.

OPERATION

Disconnect pump power, fill tank, turn on all faucets, then connect pump power. The water will begin to flow. Turn off the tap when there is no air in the pipe. Remember, you're filling up the water heater, toilet, and shower line. When all valves are closed, the pump will stop. If the pump does not stop, disconnect the power and check the troubleshooting guide.

Note: If operated under pressurized conditions for a long time, the pump surface will become hot in contact.

ADJUSTING THE BYPASS VALVE AND PRESSURE SWITCH

TIP: Bypass adjustment should be performed by a professional technician using a proper gauge and equipment. Without the proper equipment, you could mis-adjust the valve or switch causing the pump to work improperly (see Caution below).

About the Bypass Valve

The pump uses a spring-loaded bypass valve to maintain smooth performance as water demands rise and fall. When a faucet is turned on the pump is providing full water flow, so the bypass valve is closed. But when there is little to no water demand, the bypass valve opens to allow water to flow back from the outlet side to the inlet side, keeping a steady flow of water within the pump with almost no cycling.

ADJUSTING THE PUMP'S SHUT-OFF PRESSURE: (1)

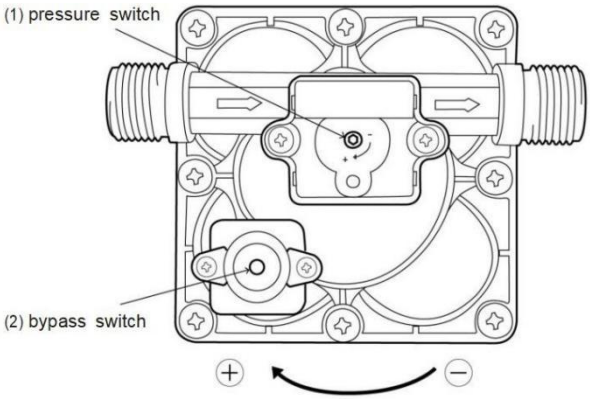
•To raise the shut-off pressure, use a 2mm Allen wrench to turn the pressure switch screw clockwise to the desired pressure.

•To lower the shut-off pressure, use a 2mm Allen wrench to turn the pressure switch screw counterclockwise to the desired pressure.

ADJUSTING THE BYPASS: (2)

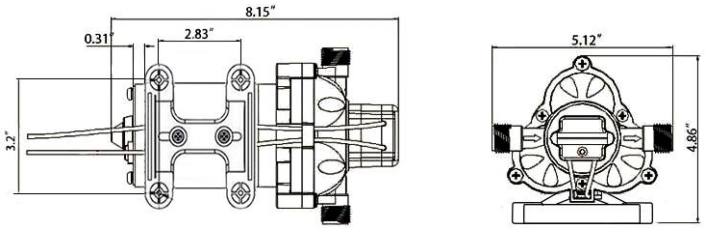
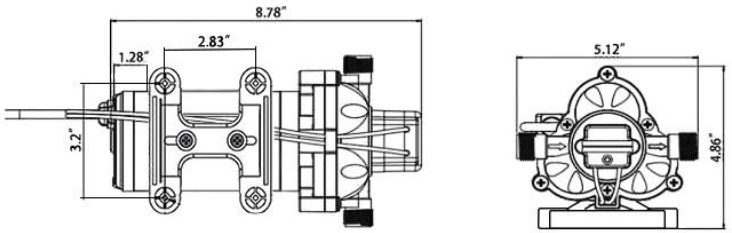
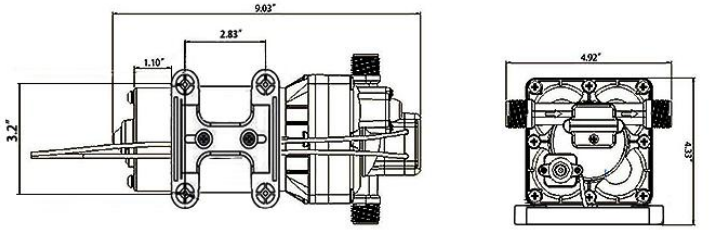
•To raise the pressure at which the bypass starts and raise the full bypass pressure, use a 2mm Allen wrench to turn the bypass screw clockwise to the desired pressure.

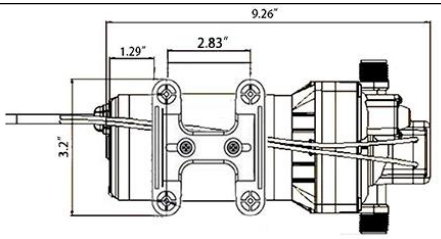
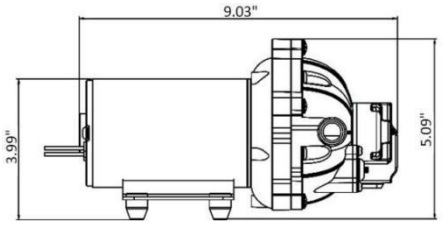
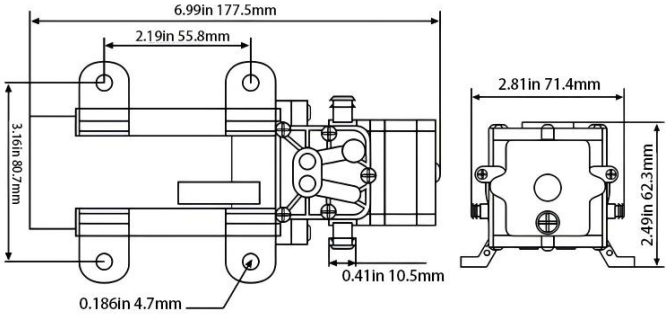
•To lower the pressure at which the bypass starts and lower the full bypass pressure, use a 2mm Allen wrench to turn the bypass screw counterclockwise to the desired pressure.



CAUTION: The pressure setting for full bypass must be at least 8psi higher than the shut-off pressure of the pump. If the switch and bypass are adjusted too closely, the bypass and switch shut-off can overlap and the pump will not shut off.

DIMENSIONAL DRAWING

	LSDP1-040-045-33 Use for Yachts, RV, Camping Thermal Protection Easy to Install
	LSDPA1-040-050-33 Use for Kitchen, Bathroom Thermal Protection Easy to Install
	LSDP1-050-070-42 Use for Yachts, RV, Camping Thermal Protection with Bypass Powerful than the 33 Series

	LSDP1-060-070-42 Use for Kitchen, Bathroom Thermal Protection with Bypass Powerful than the 33 Series
	LSDPA1-050-060-51 Use for Kitchen, Bathroom Thermal Protection with Bypass Powerful than the 42 Series
	LSDP1-020-060-22 Use for Irrigation RV, atomization cooling Thermal Protection Easy to Install

Accessories for Other Models（LSDPA1-050-060-51 No hexagonal wrench*1）



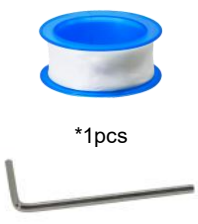
*2pcs



*2pcs



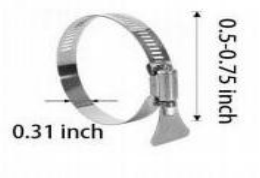
*1pcs



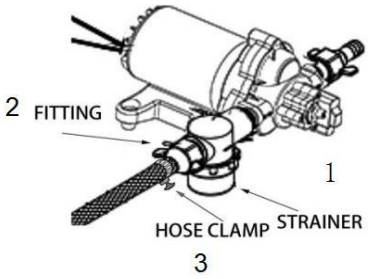
*1pcs

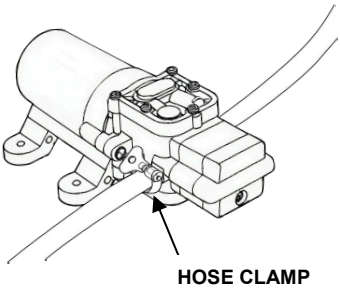
*1pcs

Accessories for LSDP-020-060-22



*2pcs





INSTALLATION

LSDPA1-040-050-33; LSDPA1-050-060-51;
LSDP1-040-045-33; LSDP1-050-070-42;
LSDP1-060-070-42; LSDP1-020-060-22;

STEP1

Open the pump cover.Some water from factory testing may spill out.

STEP2

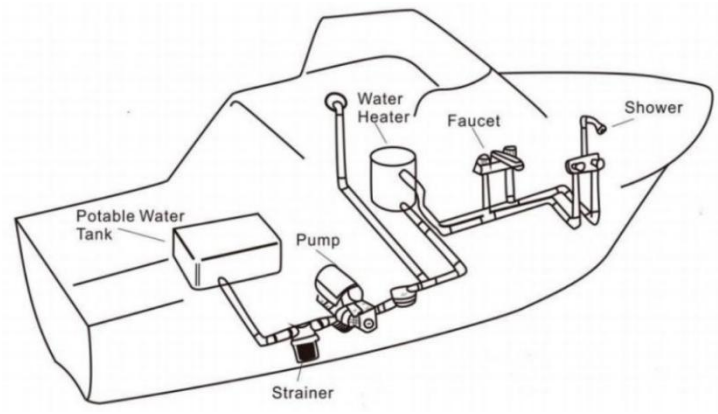
Mount pump vertically, with pump head down or horizontally in an accessible location. If mounting vertically, motor up, attach motor mounts first ,then pump head mounts, while supporting weight of pump.

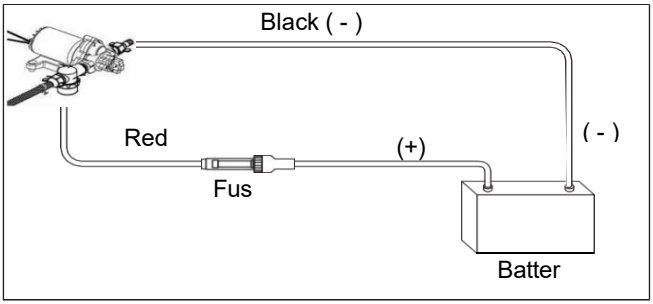
STEP3

Connect the filter to the water inlet end first, and then install adapters to the water inlet and outlet . After connecting the water pipe, secure the connection points with clamps.

STEP4

After connecting the power supply, turn on the faucet and the pump will start automatically





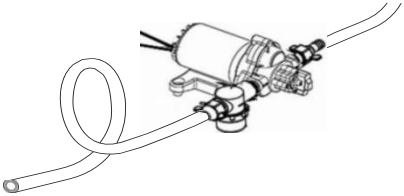
WIRING(12V)

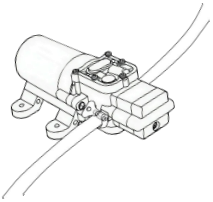
STEP1

Use 14 gauge stranded wire to 20',12 gauge to 50',from power source.

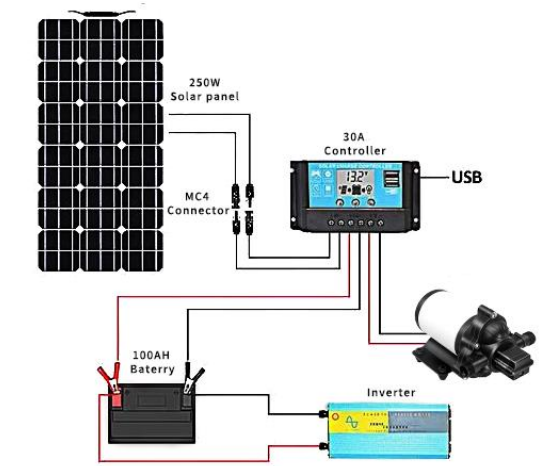
STEP2

Install a 20 amp fuse protection on the positive lead.

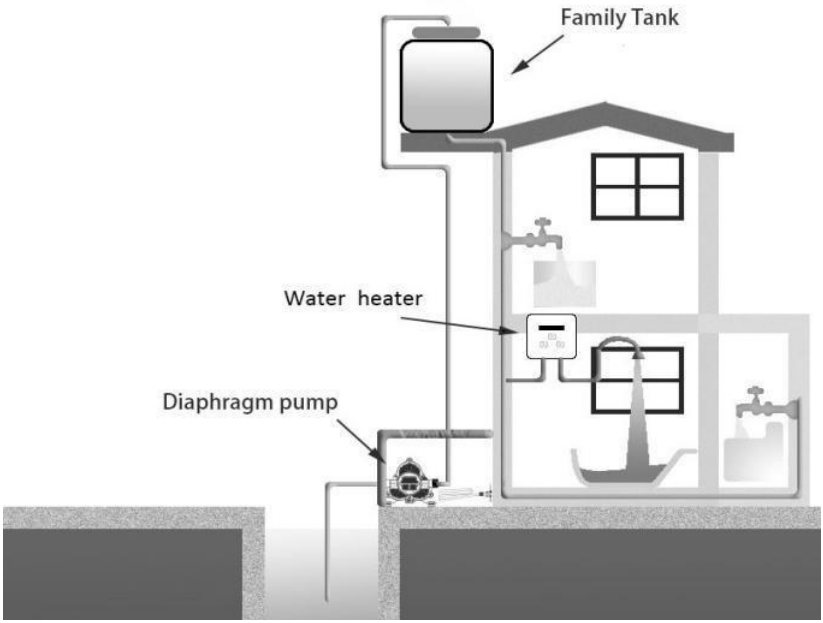




Note: To help reduce noise and vibration of the pump through the system use flexible lines on the inlet and outlet of the pump as shown above. Be sure to use lines rated to not collapse under pump vacuum.



If the (12V/24V) pumps do not require an inverter



TROUBLE SHOOTING

BEFORE SERVICING PUMP, TURN OFF PUMP AND DRAIN WATER FROM SYSTEM!!

Q1:Failure to Prime-Motor operates,but no pump discharge

- Restricted intake or discharge line
- Air leak in intake line
- Debris in pump
- Punctured pump diaphragm(pump leaks)
- Crack in pump housing

Q2:Motor falls to turn on

- Loose wiring connection
- Blown fuse
- Pump circuit has no power
- Pressure switch failure
- Defective motor

Q3:Pulsating Flow

•Restricted pump delivery.Check discharge lines,fittings and valves for clogging or undersizing

Q4:The pump is short cycling anytime power is on

•Check whether there is leakage at the outlet of the water pump and the pipeline connecting the outlet

•The water flow of the water outlet is too small. (Method: Replace larger water export)

Q5:How to adjust the pressure switch?

•Open the pressure switch cover with screwdriver

•Turn hex bolt clockwise pressure becomes larger,turn counterclockwise becomes smaller

TIP: When the pressure is insufficient,rotate the pressure switch clockwise. Conversely,rotate counterclockwise.

Q6:The water pump does not turn off when it reaches pressure or the faucet has been closed.

•Check whether there is air leakage at the water inlet and inlet pipeline of the water pump.

•Re-tighten the transparency cover of the strainer

•Check if the pressure switch is damaged

TIP: The inspection method of the pressure switch is to connect the two wires connecting the pressure switch,bypass the pressure switch it. If the water pump starts to work,indicates that the pressure switch is damaged.(Make sure to test with the power off.)

Q7:No pump water,but the motor is running

•The distance between the water source and the pump exceeds the water pump self-priming capacity.

•Check if the inlet pipe is completely placed in the water source.

•Check if the delivery distance exceeds the lift capacity of the pump

Q8:Pump Fails to Turn Off After All Fixtures Are Closed

- Empty water tank
- Insufficient voltage to pump(low battery)
- Punctured pump diaphragm(pump leaks)
- Discharge line leak
- Defective pressure switch

Q9:Low Flow and Pressure

- Air leak at pump intake
- Accumulation of debris inside pump and plumbing
- Worn pump bearing(excessive noise)
- Punctured pump diaphragm(pump leaks)
- Defective motor

Q10:The pump does not work

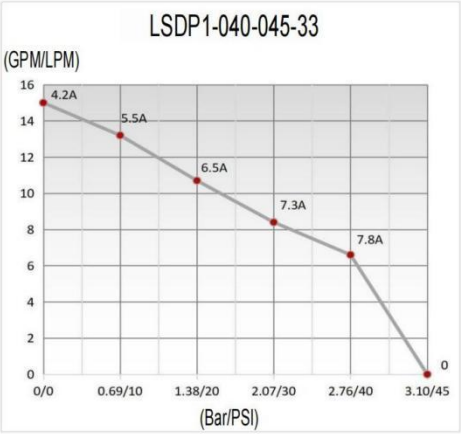
- Check if the power cord is accurately plugged
- DC power pump,check if the power supply is powered
- Check if the pressure switch is damaged(Method: Please refer to the TIP of the Q6)

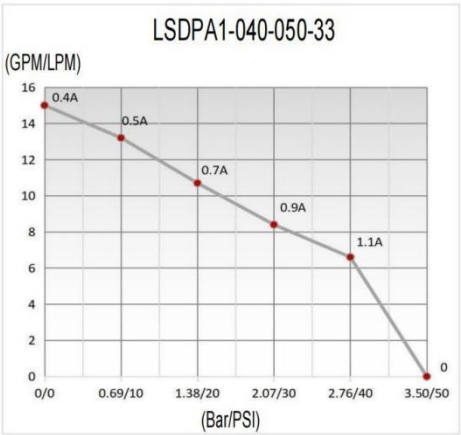
Q11:The pump head is leaking

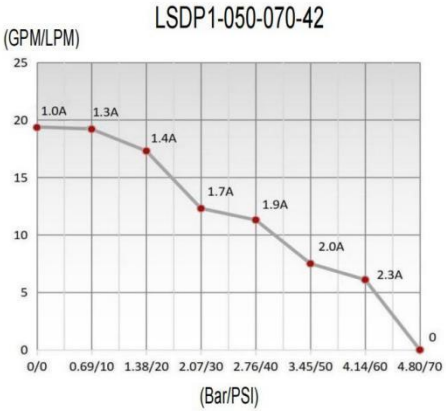
- The screw of the pump head is loose (Method:Tighten the screw)
- The bypass switch is loose. (Method:Tighten the screw)
- Pump pressure setting is too high.(Method:Adjust the pressure switch.)
- Check if the part of the pump head is damaged.

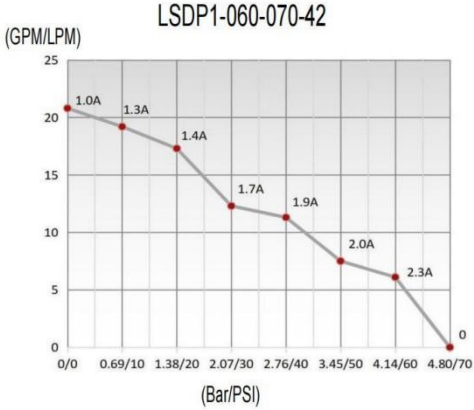
Q12.Pump noise

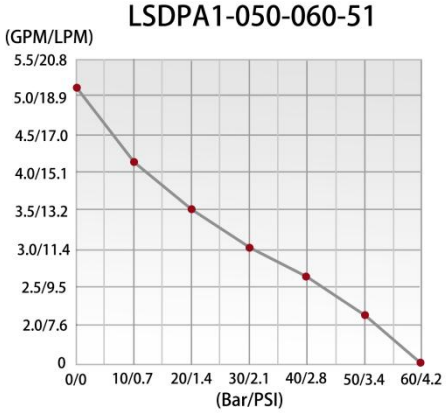
- Check if the mounting feet are compressed too tightly.
- Is the mounting surface flexible? If so ,it may be adding noise.
- Check for loose head/screws.
- If the pump is plumbed with rigid pipe,then it may transmit noise more easily.

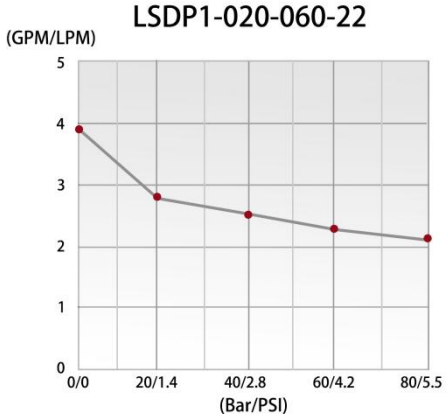

LSDP1-040-045-33
(GPM/LPM)
16
14
12
10
8
6
4
2
0
4.2A
5.5A
6.5A
7.3A
7.8A
0
0/0
0.69/10
1.38/20
2.07/30
2.76/40
3.10/45
(Bar/PSI)

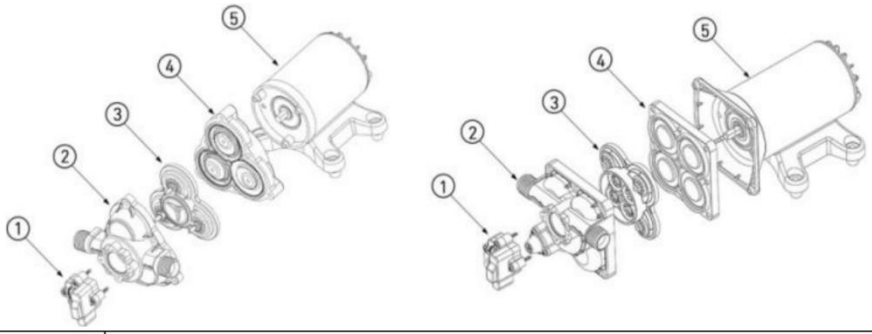

LSDPA1-040-050-33
(GPM/LPM)
16
14
12
10
8
6
4
2
0
0.4A
0.5A
0.7A
0.9A
1.1A
0
0/0
0.69/10
1.38/20
2.07/30
2.76/40
3.50/50
(Bar/PSI)


LSDP1-050-070-42
(GPM/LPM)
25
20
15
10
5
0
1.0A
1.3A
1.4A
1.7A
1.9A
2.0A
2.3A
0
0/0
0.69/10
1.38/20
2.07/30
2.76/40
3.45/50
4.14/60
4.80/70
(Bar/PSI)

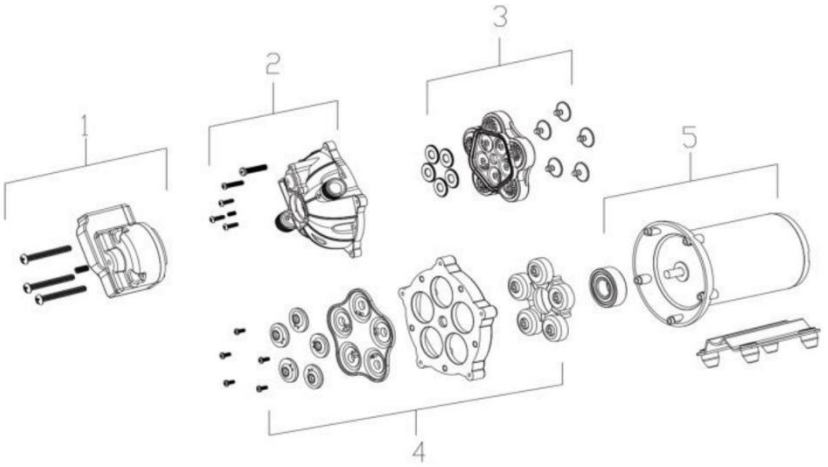

LSDP1-060-070-42
(GPM/LPM)
25
20
15
10
5
0
1.0A
1.3A
1.4A
1.7A
1.9A
2.0A
2.3A
0
0/0
0.69/10
1.38/20
2.07/30
2.76/40
3.45/50
4.14/60
4.80/70
(Bar/PSI)


LSDPA1-050-060-51
(GPM/LPM)
5.5/20.8
5.0/18.9
4.5/17.0
4.0/15.1
3.5/13.2
3.0/11.4
2.5/9.5
2.0/7.6
0
0/0
10/0.7
20/1.4
30/2.1
40/2.8
50/3.4
60/4.2
(Bar/PSI)


LSDP1-020-060-22
(GPM/LPM)
5
4
3
2
1
0
0/0
20/1.4
40/2.8
60/4.2
80/5.5
(Bar/PSI)



NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/Drive assembly
5	Motor



Key	Description	Quantity
1	Pressure Switch	1
2	Pump Head	1
3	Valve Assembly	1
4	Diaphragm Assemlby	1
5	Motor	1

SYSTEM CARE AND MAINTENANCE

Winterizing

Allowing water to freeze in the system may result in damage to the pump and plumbing system.

Non-Toxic antifreeze for potable water may be used with Wassermann pumps.Follow manufacturers recommendations. Refer to coach or equipment manufacturers instructions for their specific winterizing and drainage procedures. Do not use automotive antifreeze to winterize potable water systems.These solutions are highly toxic and may cause serious injury or death if ingested.

1. Drain the water tank.Open tank drain valve and plumbing drain valves if applicable.You may use the pump to drain the tank by opening all the faucets in the system.

Allow the pump to operate until the tank is empty.Do not operate the pump for more than 15 minutes continuously.

2. Open all faucets and flush the toilet to purge all the water from the pump and the plumbing system.Run the pump until no water is coming through the faucets. Turn power to the pump off. that all the water from the drain lines are drained.

3. Remove quick connect inlet and outlet fittings from the pump and turn the pump on to pump out remaining water from the pump head. Be sure to have a catch pan or a rag under the pump to prevent water from spilling on to the RV.Turn the pump off once the plumbing is empty.Leave the fittings disconnected from the pump until the system is ready to be used again.Make a note on your tank filler that the plumbing is not connected.

4. Be sure that all faucets are left open to protect against damage to the plumbing.

Sanitizing

Portable water systems require periodic maintenance to deliver a consistent flow of fresh water.Depending on use and the environment the system is subject to,sanitizing is recommended prior to storing and before using the water system after a period of storage.

Systems with new components,or ones that have been subjected to contamination,should also be disinfected as follows



