

FLOJET

a xylem brand

Automatic Diaphragm System Pump



CE

Purpose of this manual

The purpose of this manual is to provide necessary information for product installation, operation and maintenance.



CAUTION: Read this manual carefully before installing, using or servicing this product. Failure to follow the instructions within this manual could result in explosion, property damage, severe personal injury and/or death.



NOTICE: Save this manual for future reference, and keep it readily available at the location of the unit.

Safety



WARNING:

- The operator must be aware of safety precautions to prevent physical injury.
- Operating, installing or maintaining the unit in any way that is not covered in this manual could cause death, serious personal injury or damage to the equipment. This includes any modification to the equipment or use of parts not provided by Xylem. If there is a question regarding the intended use of equipment, please contact a Xylem representative before proceeding.
- Do not change the service application without the approval of an authorized Xylem representative.

DANGER: Failure to follow this instruction manual may lead to significant property damage or may result in serious injury or death.

Safety terminology and symbols

About safety messages

It is extremely important that you read, understand and follow the safety messages and regulations carefully before handling the product. They are published to help prevent these hazards:

- Personal accidents and health problems
- Damage to the product
- Product malfunction

Hazard Level:	Indication:
DANGER	A hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	A hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	A hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	A potential situation which, if not avoided, could result in undesirable conditions. A practice not related to personal injury.

Hazard categories

Hazard categories can either fall under hazard levels or let specific symbols replace the ordinary hazard levels symbols. Electrical hazards are indicated by the following specific symbols:



ELECTRICAL HAZARD:

These are examples of other categories that can occur. They fall under the ordinary hazard levels and may use complementing symbols:

- Crush hazard
- Cutting hazard
- Arc flash hazard

User safety

General safety rules

These are safety rules apply:

- Always keep work area clean
- Pay attention to the risks presented by gas and vapors in the work area.
- Avoid all electrical dangers. Pay attention to the risks of electric shock or arc flash hazards
- Always bear in mind the risk of drowning, electrical accidents and burn injuries

Safety equipment

Use safety equipment according to the company regulations. Use this safety equipment within the work area:

- Hard hat
- Safety goggles, preferably with side shields
- Protective shoes
- Protective gloves
- Gas mask
- Hearing protection
- First-aid kit
- Safety devices

NOTICE: Never operate a unit unless safety devices are installed.

Electrical connections

Electrical connections must be made by certified electricians in compliance with all international, national, state and local regulations. For more information about requirements, see sections dealing specifically with electrical connections.

Precautions before work

Observe these safety precautions before you work with the product or are in connection with the product:

- Provide a suitable barrier around the work area, for example, a guard rail
- Make sure that all safety guards are in place and secure
- Make sure that you have a clear path of retreat
- Make sure that the product cannot roll or fall over and injure people or damage property
- Make sure that the lifting equipment is in good condition
- Use a lifting harness, a safety line and a breathing device as required
- Allow all system and pump components to cool before you handle them
- Make sure that the product has been thoroughly cleaned
- Disconnect and lock out power before you service the pump
- Check the explosion risk before you weld or use electric hand tools

Wash the skin and eyes

Follow these procedures for chemicals or hazardous fluids that have come into contact with your eyes or skin:

Condition	Action
Chemicals or hazardous fluids in eyes	1. Hold your eyelids apart forcibly with your fingers 2. Rinse the eyes with eyewash or running water for at least 15 minutes 3. Seek medical attention
Chemicals or hazardous fluids on skin	1. Remove contaminated clothing 2. Wash the skin with soap and water for at least 1 minute 3. Seek medical attention, if necessary

Environmental safety

The work area

Always keep the station clean

Waste and emissions regulations

Observe these safety regulations regarding waste and emissions:

- Appropriately dispose of all waste
- Handle and dispose of the processed liquid in compliance with applicable environmental regulations
- Clean up all spills in accordance with safety and environmental procedures
- Report all environmental emissions to the appropriate authorities



WARNING: Radiation Hazard. Do NOT send the product to Xylem if it has been exposed to any nuclear radiation

Electrical installation

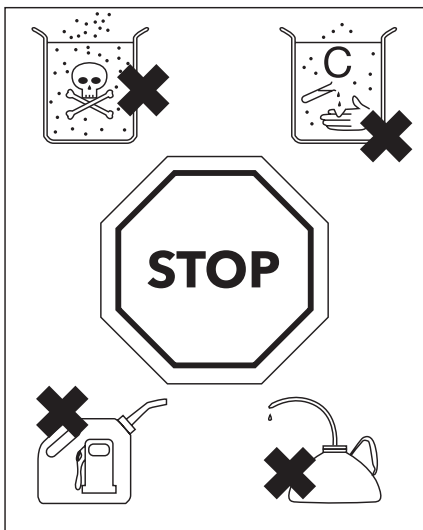
For electrical installation recycling requirements, consult your local electric utility

Recycling guidelines

Always follow local laws and regulations regarding recycling



WARNING: It is critical that chemical compatibility between the pump and the liquid media be verified by the user before installation and use in the equipment. Chemical incompatibility may cause premature failure and may result in leakage. Always read the manufacturers literature before you use fluid or solvent in the pump.



Installation/Mounting

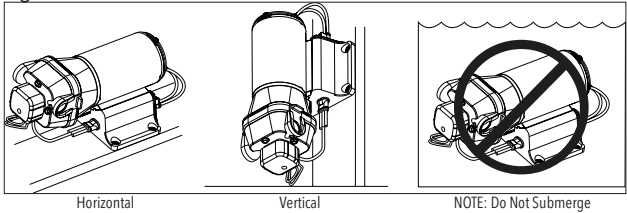
CAUTION: Not For Continuous Duty, Intermittent Duty Only

CAUTION: Installation Notes: To avoid the risk of fire. Be sure that the area where pump is installed is isolated from gas, fuel tanks, electrical wiring looms or flammable substances. Failure to do so may cause injury or death.

CAUTION: Installation Notes: To avoid the risk of fire. Do not install this product if visible damaged. If damage exposes electrical contacts, electrical sparks could ignite fuel fumes. Failure to do so may cause injury or death.

1: Select pump location. Pump must be installed in a dry, ventilated area.

Figure 2.



2: Connect fittings supplied with the pump to the system plumbing. Use $\frac{1}{2}$ " (13mm) I.D. flexible hose (preferably braided or reinforced) to reduce vibration through the plumbing system (Figure 1). Use hose clamps on the slip on barb hose connectors.

Important: Install strainer in the pump inlet to protect valves from debris.

3: Fasten pump to a flat surface. If mounting vertically; install with pumphead down (Figure 2) Do not over tighten screws to allow rubber mounts to absorb vibration.

4: Install inlet (A) and discharge (B) fittings. Firmly push slide clips (C) forward to lock fittings in place. - Figure 3

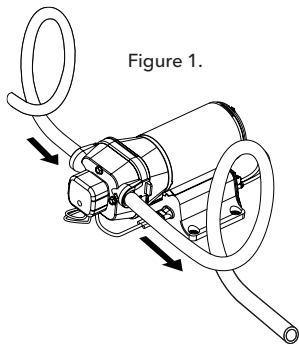


Figure 1.

Figure 3.

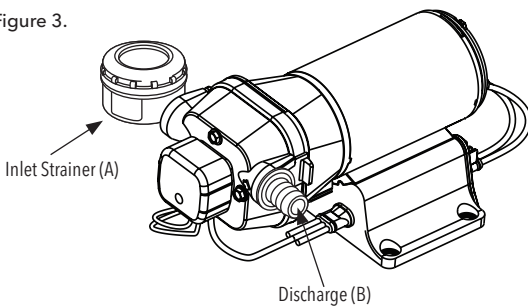
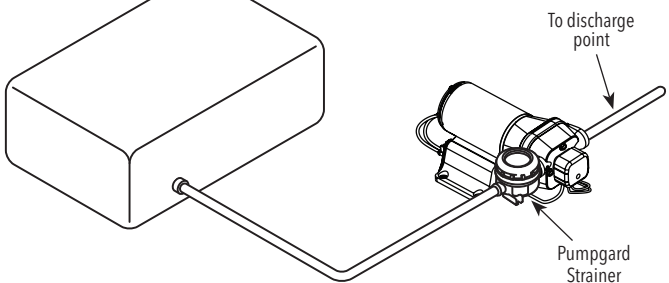


Figure 4.





WARNING

FIRE HAZARD



Wiring must comply with applicable electrical standards and include a properly sized fuse or circuit breaker. Improper wiring can cause a fire resulting in injury or death.



CAUTION: Suggested wiring information is given as a reference. For proper information please reference local wiring codes and specification guidelines.

Model	Volts	Amps	Fuse
R4320343A	24V	6.0 A	10 A Required
R4426343A	24V	6.0 A	10 A Required
R4420343A	24V	6.0 A	10 A Required
R4425509A	24V	6.0 A	10 A Required
R4425511A	24V	6.0 A	10 A Required
R4425512A	24V	6.0 A	10 A Required
R4320143A	12V	12.0 A	15 A Required
R4420143A	12V	12.0 A	15 A Required
R4426143A	12V	12.0 A	15 A Required
R4425503A	12V	12.0 A	15 A Required
R4425505A	12V	12.0 A	15 A Required
R4425506A	12V	12.0 A	15 A Required

Wire Size Table

Total Wire Length - feet (meters)

Pump Voltage	0 - 20 ft (0 - 6 m)	20 - 35 ft (6 - 9 m)	35 - 55 ft (9 - 12 m)
12 VDC	#14 AWG (2.5 mm ²)	#12 AWG (4 mm ²)	#10 AWG (6 mm ²)
24 VDC	#16 AWG (1.5 mm ²)	#14 AWG (2.5 mm ²)	#12 AWG (4 mm ²)

Electrical installation

Electrical Hazard:



WARNING: Make sure that all connections are performed by qualified installation technicians and in compliance with the regulations in force.



WARNING: Before starting work on the unit, make sure that the unit and the control panel are isolated from the power supply and cannot be energized.

Installation:



WARNING:

- Observe accident prevention regulations in force.
- Use suitable equipment and protection.
- Always refer to the local and/or national regulations, legislation, and codes in force regarding the selection of the installation site, plumbing, and power connections.

Electrical requirements:

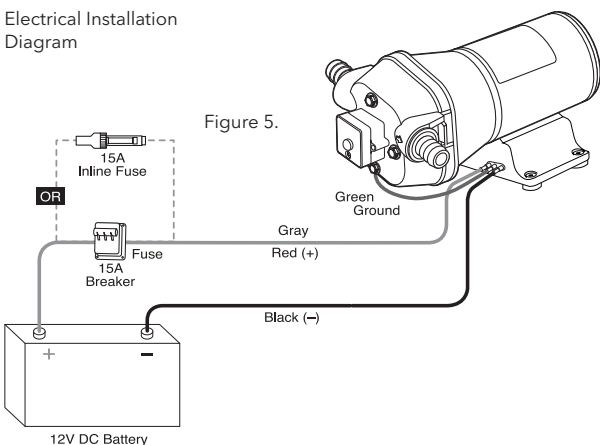
The local regulations in force overrule specified requirements listed below.

Electrical connection checklist

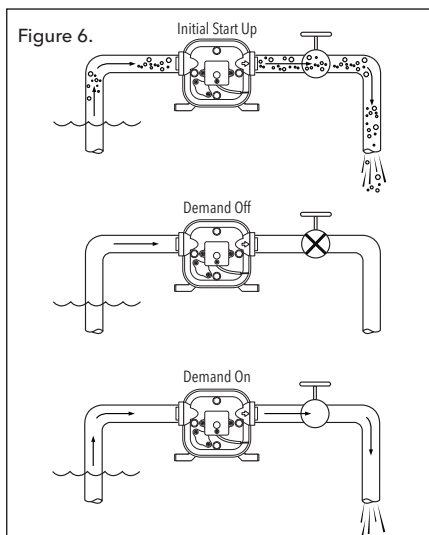
Check that the following requirements are met:

- The electrical leads are protected from high temperature, vibrations, and collisions.
- The current type and voltage of mains connection must correspond to the specifications on the data plate on the pump.

Electrical Installation Diagram



Operation



- Initial Start up
- Open all faucets
- Turn pump switch "ON"

NOTE: Expect a 10 second delay for power up.

- When water is free of air, turn all valves off beginning with the valve closest to the pump (Figure 6)

Important: Do not operate the pump more than 15 minutes continuously.

Winterizing

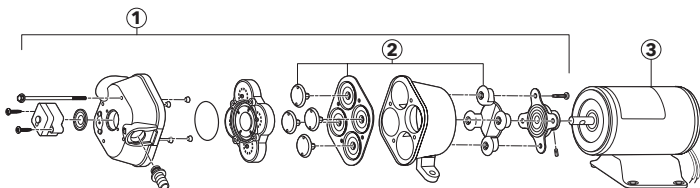


CAUTION: Allowing water to freeze in the system may result in damage to the pump, plumbing system or Exposed Industrial applications. Non-Toxic antifreeze for potable water may be used with Flojet pumps. Follow manufacturer's recommendations. Refer to equipment manufacturer's instructions for their specific 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. You may use the pump to drain the tank by opening all the valves in the system. Allow the pump to operate until the tank is empty. Do not operate the pump more than 15 minutes continuously.
2. Open all valves and purge the water from the plumbing system. Turn off power to the pump. Be sure that all the water from the drain lines is 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 onto the floor. 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 valves are left open to protect against damage to the plumbing.

Dimensions: Width - 6 1/8 inches (155.58mm), Height - 4 3/4 inches (120.65mm), Length - 9 7/8 inches (250.83mm)

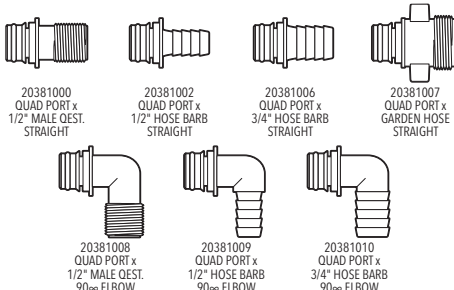
Exploded View



Parts List

KEY	Description	QTY	Kit No.
1	Pumphead Assembly	1	189146330A (EPDM)
	Pumphead Assembly	1	189146335A (VITON)
2	Diaphragm Kit	1	20403040A
3	Motor - 12	1	R2009236A
	Motor - 24	1	R2010180A
4	Pumpgard Strainer	1	01740950S

Accessories - Snap-In Port Fittings



We hereby declare, under our sole responsibility, that our product to which this declaration relates has been designed to comply in accordance with the following Directives:

Electromagnetic Compatibility Directive 2004/108/EC
Restriction of Hazardous Substances Directive (RoHS) 2011/65/EU