



ENVIRONMENTAL CONTROL SYSTEMS

User's Manual
Professional Series Direct Drive Pump
.25 – 2.1 GPM Series



**Safety, Operating, Installation,
and Maintenance Instructions**

Safety Instructions

Read all labels and instructions before beginning installation. This equipment meets or exceeds existing electrical codes as defined in the National Electric Code (NEC). Refer to local codes to ensure compliance and always use a licensed contractor for water and electrical hook-ups.

The pump must be grounded. In the event of a malfunction, grounding will reduce the risk of electric shock by providing a path of least resistance for the electric current. The pump is equipped with a cord having a ground conductor and must be connected to an appropriate outlet that is installed and grounded in accordance with all local codes and ordinances. Improper connection of the equipment grounding can result in a risk of electric shock.

IMPORTANT - Once the unit is plumbed and the proper electrical connection has been made, turn on the water supply. The pump is designed to have the water turned on at all times. Always use fresh, potable water to supply the system. Do not use water that has not been properly tested or treated for bacteria, contaminants, etc... Completely drain the system after each use.

This pump is non-submersible and rated for a maximum operating pressure of 1000 PSI. The pressure regulator is set from the factory and **SHOULD NOT EXCEED 1000 PSI/70 Bar**. Changing the pressure output on the pump may create a dangerous situation and will void any Fogco warranties. All pumps have been evaluated for use with water only. Do not use with flammable liquids

Maintenance Instructions

Water Seals

- This pump contains water seals that wear with use and will need to be replaced periodically. Water seals are NOT a warranty item. Depending on operating conditions and water quality, the water seals will last between 500 and 2000 hours of operation. Once the seals are sufficiently worn, they will allow water to drip from beneath the brass head on the pump indicating the need for replacement. Failure to replace the seals once they have begun to leak will cause extensive damage to the pump.

Changing Pump Oil

- Oil should be changed after the first 50 hours and then once a year or every 500 hours of operation, whichever comes first. Run pump for 15 minutes prior to changing the pump oil. Check the pump for leaking water seals while the pump is running.
- Locate the oil drain fitting on the bottom side of the pump, remove the cap and drain the oil into a container. Dispose of the used oil at a proper oil disposal facility.
- After draining is completed, replace drain cap and fill pump with **FOGCO Pump Oil 93222**. Oil will show ½ full in sight window when pump is full.

Water Filter Inspection

- To ensure the long life of the pump the external filter element needs to be replaced at least every 6 months. The time in between replacements will vary depending on the use of the system and the condition of the water.

Fog System

- The nozzles, anti-drip valve, and auto drain valves should be inspected twice a year to ensure proper performance.
- If mineral deposits affect the operation of these items, the component should be removed from the system and cleaned using the Fogco Nozzle Cleaner.
- If cleaning does not improve the performance, the components should be replaced.

Fuses

- This unit contains a fuse that provides short circuit and thermal protection for the inlet valve branch circuit.
- Blown fuses must be replaced. Two replacement fuses are provided for each fuse size. These spare fuses can be found with the instruction manual.
- Contact Fogco Customer Service to troubleshoot the unit if a fuse blows.

Pump Component Replacement

All repair or replacement of components must be completed by a Fogco Authorized Factory Service Center or a Fogco Authorized Contractor. Contact our Customer Service Department for more information.

Installation & Operating Instructions

Installing the plumbing manifold

There are two pre-installed compression nuts on the plumbing manifold. They will be used to attach the manifold to the pump head. Connect the manifold to the bare pump by bending the flexible by-pass hose and aligning the compression nuts to the male threaded fittings coming out of the bare pump. The pressure gauge should be on the top with the front of the gauge facing the motor. Tighten the two compression nuts hand tight then an additional ½ turn using a 11/16" wrench. The assembly should look like the image on the cover page of these instructions.

Installing inlet and outlet fittings

Thread the 3/8" MPT x ½" slip lok 90-degree swivel fitting into the open port on the inlet solenoid. Thread the 3/8" MPT x 3/8" slip lok fitting into the open port located next to the back side of the pressure gauge. This is the high-pressure outlet for the pump.

Installing the filtration

Attach the provided round filter bracket to the filter bracket riser using the provided bolt and washers. Place the plastic washer between the round filter bracket and the filter bracket riser. Thread the ½" MPT x ½" slip lok fitting into the filter inlet. Thread the ½" MPT x ½" slip lok 45-degree fitting into the filter outlet. Connect the short length of pre-cut ½" tubing between the filter outlet and the inlet solenoid. Connect the 10' length of ½" feed line tubing to the filter inlet. Connect the pre-assembled hose adapter fitting onto the end of the ½" feed line and connect the hose adapter fitting to a ¾" hose bib.

Connecting the solenoid valve electrical cord

Locate the small electrical cord on the bottom of the motor electrical box and route it under the pump to the solenoid valve coil. Attach the square rubber seal onto the solenoid valve coil and insert the connector on the end of the electrical cord onto the solenoid valve coil. Tighten the screw to secure in place.

Operation of the Pump

Before turning on the pump, remove the red plug from the top of the bare pump and replace it with the provided yellow breather cap.

Insert the 3/8" high pressure feed line into the high-pressure outlet on the pump and run over to the area where the fog lines will be installed.

This pump includes an auto drain valve and a slip lok t fitting. The auto drain valve is highly recommended and will drain the system each time it is turned off. To install, cut the 3/8" high pressure feed line tubing at a low point next to the pump. Insert the slip lok fitting. Thread the auto drain valve into the 10/24 female thread on the side of the slip lok fitting. The drain valve is spring loaded and will open and close automatically.

The Fogco pumps are designed for use with the appropriately rated tubing and fittings to create a fog system for outdoor cooling, humidification, dust and odor control, fire suppression, and Mistscaping. **All Safety Instructions and Operating Instructions should be followed to ensure safe operation of the equipment.**

- The pump should be installed above top grade level on a solid foundation. It should be in a cool, dry location with easy access to water and power. It should be located near a drain.
- If the system will be used in freezing conditions, the pump should be located in a place where the temperature can be maintained and all water lines should be drained after each use.
- **The power supply to the pump must be a dedicated circuit with a breaker capacity as listed below**
15 Amp: 6025116, 6025216, 6050116, 6050216, 6100216, 6150216, 6200216
20 Amp: 6100116, 6150116
- The water supply should be a constant and should provide 2 times the pumps rated flow with the appropriately sized feed line as prescribed in the Installation Instructions.
- When connecting the pump directly to any rigid line, always install a flexible outlet hose on the pump. This will reduce the vibration transferred from the pump to the rigid tubing.
- The On/Off operation of the Professional pumps is controlled by the switch on the motor electrical box.
- Check the oil level with the dipstick and the sight gauge. The proper level is ½ full on the sight gauge.

Professional Series Technical Information

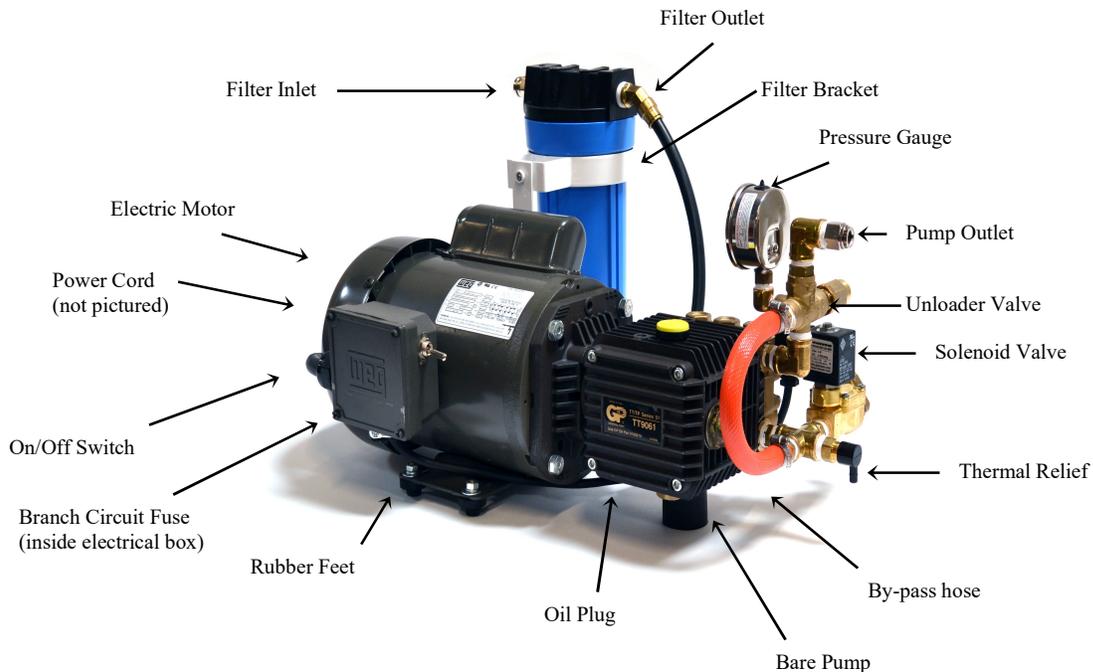
Model	Size	GPM	Motor HP	Volts / Phase	Full Load Amps	Dimension In.	Weight Lbs
6025116	.25	.5	.5	115 / 1	8.0	23 x16 x 14	55
6025216	.25	.5	.5	230 / 1	4.0	23 x16 x 14	55
6050116	.5	.5	.5	115 / 1	8.0	23 x16 x 14	55
6050216	.5	.5	.5	230 / 1	4.0	23 x16 x 14	55
6100116	1	1.0	1.0	115 / 1	13.6	23 x16 x 14	60
6100216	1	1.0	1.0	230 / 1	6.8	23 x16 x 14	60
6150116	1.5	1.5	1.5	115 / 1	15.0	23 x16 x 14	63
6150216	1.5	1.5	1.5	230 / 1	7.48	23 x16 x 14	63
6200116	2.1	1.5	1.5	115 / 1	15.0	23 x16 x 14	65
6200216	2.1	1.5	1.5	230 / 1	7.48	23 x16 x 14	65

Full Load Amps are the average amp draw for the pump and will vary from unit to unit. All information listed is subject to change.

Bare Pump	Valve Caps
93239	22mm
92931	22mm
92783	22mm
93533	22mm
92784	22mm

Professional Series Replacement Parts

Model #	Bare Pump	Pump Seals	Electric Motor	Solenoid Valve	Unloader Valve	Pressure Gauge	Fuse	On/Off Switch	Power Cord	Thermal Relief
6025116	93239	93411	93542	93182	93521	93585	93252	95002	93174	95007
6025216	93239	93411	93542	92547	93521	93585	93251	95002	93162	95007
6050116	92931	93420	93542	93368	93521	93585	93252	95002	93174	95007
6050216	92931	93420	93542	93596	93521	93585	93251	95002	93162	95007
6100116	92783	92594	94073	93368	93521	93585	93252	95002	93174	95007
6100216	92783	92594	94073	93596	93521	93585	93251	95002	93162	95007
6150116	93533	92594	92787	93368	93521	93585	93252	95002	93178	95007
6150216	93533	92594	92787	93596	93521	93585	93251	95002	93162	95007
6200116	92784	92594	92787	93368	93521	93585	93251	95002	93178	95007
6200216	92784	92594	92787	93596	93521	93585	93251	95002	93162	95007



Professional Series Pump Wiring Diagrams

