

Gear Pump 311 and 312

Basic Features

- Self-priming
- For diesel, oil, or water
- Discontinuous use
- IP65 rated
- Available in 12 and 24 volt

Optional Features

- On/Off Switch (S)
- Reversing Switch (R)
- Bypass

Installation

1. Mount pump within 4.2 ft in height from the minimum level of the fluid.
2. This pump system can be mounted in any orientation, except with the pump above the motor.
3. Use a minimum 1/2" ID hose for all suction and discharge plumbing.
4. Apply thread sealant (Loctite 565 or equivalent) to all fittings installed on adapters. Do not remove the fittings that come installed on the pump head.

Electrical Connection

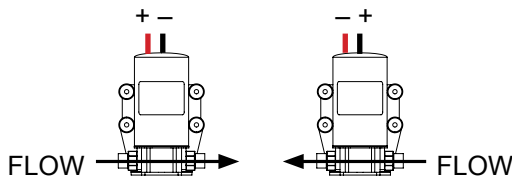
Pump must be connected to a DC battery or transformer with amperage over 20A (12V) or 10A (24V). Installation must include a suitably rated fuse, user provided. Cable size depends on distance from pump to battery.

Flow Direction

Applies if pump is without a switch or pump has on/off switch (S). Does not apply if pump is equipped with reversing switch (R) or bypass option (B).

Connect red wire to (+) and black wire to (-), then flow is left to right.

Connect black wire to (+) and red wire to (-), then flow is right to left.



System Priming

To avoid unnecessary wear on the gears by running them dry, it is necessary to prime the pump before initial use. Once the system is primed, this procedure does not have to be repeated again.

To prime the system:

1. Pour a small amount of liquid to be pumped (about 3 oz) into the suction hose.
2. Operate the pump for a few seconds to draw this liquid into the pump.

Fluids

Designed for diesel, oil or water transfer. This pump is not designed to pump gasoline. The motor is NOT ignition protected.

	GP-311 12V	GP-311 24V	GP-312 12V	GP-312 24V
Amp. Draw	8A	4A	12A	7A
Fuse	25A	15A	35A	20A
Max. Pressure	21.7 psi / 1.5 bar (no bypass option)		50 psi / 3.5 bar (no bypass option)	
<u>Cable</u>				
6.5 ft	AWG14	AWG17	AWG12	AWG17
13 ft	AWG11	AWG14	AWG10	AWG12
19.6 ft	AWG10	AWG12	AWG9	AWG11

Ambient Conditions

- Minimum ambient temperature -4°F / -20°C
- Maximum ambient temperature 140°F / 60°C

Operation

Duty cycle is 30 minutes on and 30 minutes off.

Avoid high pressure operating conditions to prevent overheating of the pump.

Do not run dry. Pump should run dry only while starting duty cycle.

Note: Care should be taken not to operate the pump with either the suction or discharge sides closed. Ensure that all system valves are open prior to pump operation.

Maintenance

- If period without use exceeds 30 days, especially if used for transferring fresh or salt water, it is necessary to run fresh water the pump before re-use.
- Run the pump for a few seconds and then tighten the screws again.
- Verify pump is running to maximum operating pressure conditions in specification.
- Every month, check inside pump head for debris.
- Every month, check electrical for condition.

Replacement Part	Part #
O-ring for cover plate	11-3110
Gears (1 of each)	11-3108 11-3109

