

How it works:

The PosiFlow sensor is connected into the discharge line of a metering pump. It measures the pressure spikes it sees in the discharge line and outputs a 100mS contact closure signal (non-isolated open collector (NPN)) with each detected pump pulse.

Troubleshooting:**If you're not getting a signal from the PosiFlow, check the power:**

If power is applied, the LED on top of the PosiFlow should be a flashing green while the pump is pumping. It will flash with each output pulse. It will turn solid RED in abnormal pressure conditions (below roughly 30 PSI or above 150 PSI).

If there is no flashing green LED with each pump stroke, check the wiring:

RED: +12VDC
BLK: COMMON (GND)
WHT: SIGNAL

Check the voltage of the supply to be sure it is 12VDC +/-2VDC.
Check that the pump is not operating under an air lock condition.

Pump operates, PosiFlow is OFF, it is wired correctly, but there is no signal from the PosiFlow (no flashing green LED):

1. **Is there enough backpressure?** The most likely cause for the PosiFlow not to work correctly is lack of proper backpressure. 40-45 PSI of backpressure is required for the PosiFlow to sense flow. If the system the pump is dosing into does not have adequate backpressure, a separate device to create backpressure should be installed downstream of the PosiFlow. This can either be an adjustable backpressure/anti-siphon valve or, if being used on E-Series pumps with 3/8" tubing, there is a High-Pressure Spring option. E90375 is a special spring that replaces the standard spring in the injection valve supplied with the pump. The spring simulates approximately 50PSI backpressure.
2. **Is the pump dead-headed?** While less likely, another option could be that the pump is in a dead-head condition (the pump is pumping against a closed discharge). Without enough pressure change detected, the PosiFlow will sense flow and stop sending signals.
3. **Are the pulses being damped out?** If the PosiFlow is mounted in the discharge line (due to pump size or using the AAVV), sometimes there is too much dampening occurring and the pressure spike to the PosiFlow is not large enough for it to sense flow. Moving the PosiFlow closer to discharge of the pump, reducing the discharge line (if larger than supplied tubing), shortening the

discharge tubing length, or increasing backpressure are all possibilities to correct this problem.

4. **Are the pump settings causing the problem?** If the pump is run too slow, or the stroke length is turned down too low, the pressure spike generated is not enough for the PosiFlow to sense. Sometimes, increasing the backpressure can compensate and correct for this. But with small output pumps, like the B11, if the speed/SL combination is not high enough in the application, the PosiFlow will not see the strokes. This is especially true when the PosiFlow is mounted downstream while being used in conjunction with an Auto Air Vent Valve.

PosiFlow appears to be working (green LED flashing with pump stroke) but my WebMaster is not getting signals:

1. **Check the wiring.** Is the White signal wire connected to the correct Digital Input terminal inside the controller (IN+)? Is the Red wire connected to the +V terminal and the Black to the common (IN-)?
2. **Check the Digital Input Page.** Is the Digital Input that the PosiFlow is wired into set-up as a PosiFlow sensor? Are the settings all correct?

PosiFlow appears to be working (green LED flashing with pump stroke) but my EW-Y pump is not registering the signals:

1. **Check the wiring.** Is the White signal wire connected to PIN 1 of Connector 3? Is the Red wire connected to the PIN 2 and the Black wire to the Common (center) of Connector 3? Refer the EW-Y manual for a diagram of the connectors.
2. **Has the EW-Y been programmed for the PosiFlow?** The pumps come with the PosiFlow sensor input shut OFF. Using the flow diagram in the EW-Y manual, go to the User Program Menu, scroll down to the “FL.CHK” setting, press DISP and scroll up/down to select one of the 3 program Modes. Description of each mode is also in the manual. Select the number of pulses to for the pump to attempt, press DISP again and the STOP/START key to accept and go back to the WAIT mode. Now, the Pump will display “FLOW” if the pump strokes, but it does not receive signals from the PosiFlow after the programmed number of missed pulses.

Pump operated, PosiFlow LED is RED:

1. Check the discharge line. Is the pump dosing to open atmosphere or possibly the tubing is cut /broken somewhere? Could the discharge line be clogged or closed by a valve? A red LED indicates abnormal pressure conditions – either too low, or too high.