

How do you know the pump is *really* pumping?

Posiflow®

FEED VERIFICATION SENSOR

The **Posiflow®** Sensor will verify that your metering pump is truly moving liquid and has not lost prime.

Designed for the E-Series pumps, the **Posiflow®** Sensor detects the flow of liquid output by the pump. Unlike our competition, it accomplishes this without any moving parts! The standard flow path of the pump is preserved so the liquid does not have to go through any gears or move a magnet to actuate a pulse in the sensor. This eliminates any concern of plugging or jamming of the sensing mechanism.

The **Posiflow®** Sensor utilizes proprietary circuitry coupled with advanced pressure sensing technology to provide the most accurate and non-intrusive flow verification device to date.



OPERATION

The output signal of the **Posiflow®** Sensor is an open-collector contact closure corresponding with each flow pulse. Additionally, a visual green LED is mounted on the top side of the sensor. This is always ON to indicate power and will briefly flash OFF in sync with each output signal.

To function accurately, the sensor requires 30PSI of back pressure. If an application has little or no system pressure, an upgrade spring for the standard injection check valve, or a separate back pressure valve, is available to ensure the sensor functions properly.

The **Posiflow®** will send out a signal with every stroke as long as there is liquid flow. If the pump becomes air-locked or if the pump is in a dead-head condition, the sensor will no longer output a signal. Also, if large volumes of air are in the line during normal pumping operation, the **Posiflow®** will temporarily stop signaling flow until normal operation returns.



EXPERT



INSTALLATION



The **Posiflow®** Sensor is easily mounted directly into the **MultiFunction** and manual air vent valves of E-Series metering pumps. Simply remove the air vent knob and thread in the **Posiflow®** Sensor in its place. The sensor will then act as the air vent knob – unscrewing it one-half to one full turn will vent any gas and can also be used to drain the discharge line.

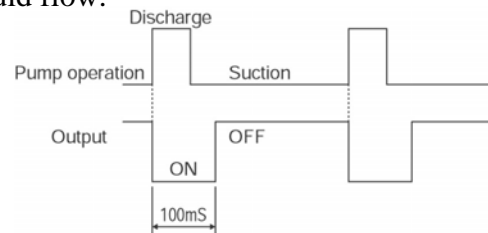
Connect the **Posiflow®** Sensor to an input device via its three-wire cable. The RED (positive) and BLK (common) wires are for 12VDC power supplied by a **WebMaster**, a Y-Module, or from an external power source.

The WHT wire is the output signal with reference to BLK. Simply connect the BLK and WHT wires to any input requiring a contact closure and the input device will get a 100mS signal when the pump sees a pulse from liquid flow.



Posiflow® in a MultiFunction Valve

An input device can then be configured to interpret the signal in any way imaginable – totalization, no-flow alarms, drum re-fill notification, etc. Many of these features are currently available with the Walchem **WebMaster**.



SPECIFICATIONS

Part Number	Description	Material
FCP-1VC	Posiflow® Sensor	VC
FCP-1VE	Posiflow® Sensor	VE
FCP-1PC	Posiflow® Sensor	PC
FCP-1PE	Posiflow® Sensor	PE

The **Posiflow®** Sensor is available for the 10, 15 & 20 sizes of EH and EZ pumps with matching liquid end codes. It will mount into either the manual air vent valve or the **MultiFunction** valve, but at this time it is not compatible with auto air vent valve (VCA or VCC codes).

The **Posiflow®** Sensor requires a minimum of 30PSI total back pressure. If this is not available, the injection valve supplied with the pump can be retrofit with an optional high-pressure spring, part number E90375. It simulates approximately 50PSI.

Power Source Voltage	12VDC ±2VDC
Current	25mA max (@ 12VDC)
Materials	Housing: PVC or GFRPP O-Rings: FKM or EPDM Sensor: 96% Ceramic (Al ₂ O ₃)
Output Pressure Range	30±5 to 150±15 PSI
Output	Type: Non-Isol. Open Collector (NPN) Rating: 24VDC max (from source) Wave Form: 100mS ±15mS
Indicator	LED (Green)
Cable	Length: 9.75 Feet Cross Section: 3.1x10 ⁻⁴ in ² Termination: #6 Fork Terminal
Ambient Temperature	0-120°F
Ambient Humidity	35-90% RH
Storage Temperature	32-120°F
Liquid Temperature	32-105°F (PVC models) 32-140°F (GFRPP models)

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