

## FLUID PRESENCE SENSOR FOR CONDUCTIVE LIQUIDS

### CAUTION:

This unit is not to be used with or around explosive or flammable liquids or in areas where explosive or flammable gasses are present. Final determination of suitability of the product for the use contemplated by the user, the manner of that use, and safety of that use, is the sole responsibility of the user.

### ELECTRICAL RATINGS:

This conductive fluid sensor is rated for a maximum of 4 amps at low voltage DC. Lower currents and voltages should be acceptable for most applications.

This sensor works on the conductivity of the liquid to which it is exposed. Some liquids are more conductive than others and the current may have to be altered to achieve the desired output. The standard wetted sensing probe material is 18-8 stainless steel. Plast-O-Matic conductive liquid sensors will not work on deionized water or other non conductive liquids. These sensors should be tested on the actual process liquid with before installation unless it has been successfully used on that same liquid in the past.

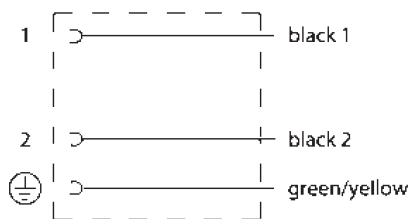
### INSTALLATION:

The Plast-O-Matic Fluid Presence Sensor is ideal for use in the fail dry port of Plast-O-Matic valves to signal an internal seal failure indicating the valve has to be replaced or have a seal kit installed. It is also very useful down stream of a relief valve or other pipeline that normally only has liquid passing through it in an emergency situation.

It is suggested that the valve in which the FPS is installed be oriented so the sensor is near the bottom of the valve to prevent the sensing probes from being trapped in an air bubble. When installed in a Tee in a pipeline, put the port of the Tee to the bottom so the sensor is at the bottom and the sensing probes are not trapped in an air bubble.

### WIRING:

The cord set needs to be wired into the control system, per the schematic shown. To stop the signal from the sensor, just unplug the DIN connector. Once triggered, the sensor may have to be reset if it continues to sense fluid when the system is activated.



To reset the liquid sensor after it has been triggered: Unplug the DIN connector on the back end of the sensor. Unscrew the liquid sensor from the valve or Tee, and dry the conductive sensing probes on the front of the sensor. Also, dry the inside of the sensing port on the valve or the Tee in which it is installed. Low pressure compressed air can be used to aid in displacing the liquid in the valve. Add a few wraps of Teflon tape to the NPT threads on the sensor body and reinstall into the valve or Tee. Be careful not to cover any part of the sensing probes with the tape.

- If the sensor is triggered when the DIN connector is put back, there is still liquid in the unit that is closing the circuit.
- If the sensor will not reset, a new sensor will need to be installed in its place.

Proper care must be taken when threading a plastic sensor into a piping system or failure of the unit may result:

1. Use PTFE TAPE or a material compatible pipe sealant.
2. MAXIMUM ALLOWABLE TIGHTNESS IS HAND TIGHT plus a quarter turn with a standard 3/4" wrench or an adjustable wrench. DO NOT use metal pipe wrenches. Do not over-torque, which could distort or crack the valve body.

