

# FS10 Single Flow Switch Instructions

#### **General Information**

Designed to be used with a variety of SeaMetrics meters, the FS10 signals when flow reaches a critical setpoint. When flow falls below the setpoint, SPDT relay contacts close to actuate whatever alarms or controls are connected to them. Setting is by means of DIP switches, and the setpoint is in pulses per minute. An output lights gives visual indication that flow limit has been reached.

## **Specifications**

Power 115 VAC

**Enclosure** NEMA 4x, 5" x 7" polycar-

bonate

Relays SPST

Relay Rating 5 A resistive at 115 VAC

5 A at 24 VDC

Setpoint Range 1 - 33,000 pulses/

minute

6%

**Setpoint Hysteresis** 

Sensor Power 25 mA at 12 VDC

nominal

### Installation

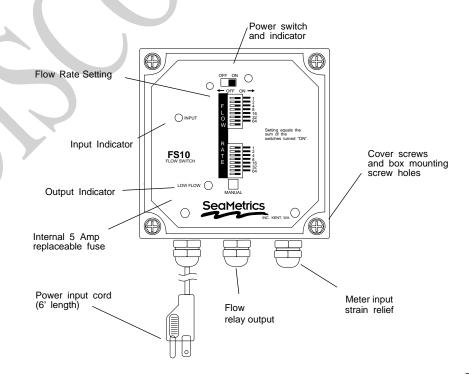
**Mounting.** To gain access to the mounting screw holes, remove the front clear cover. Mounting screw holes are at the four corners, under the cover screws. Mark the centers of these holes, using the box or the enclosed template, and drill. Finally, insert screws through the corner holes and tighten.

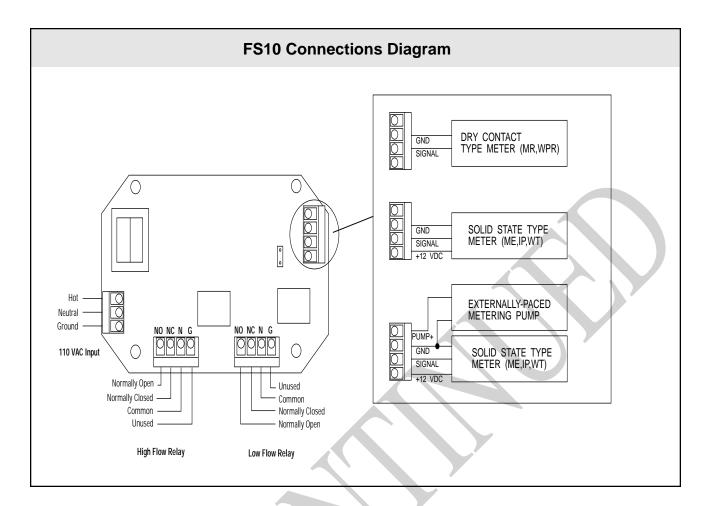
**Terminal Access.** Terminals are on the back side of the printed circuit board. Remove the front clear cover, then remove the four front plate screws. Turn the printed circuit board over to reach the terminals.

**Connect Flow Meter.** Bring the flow meter input cable into the unit through the appropriate strain relief, then connect following the Connections diagram. Either two-wire (dry contact) or three-wire (solid state) flowmeter sensors can be used.

Connect Alarm Relay. Bring alarm output cable into the unit through the appropriate strain relief and connect to relay output, as shown in the Connections diagram. Note that depending on setting, the relay may energize when the unit is first powered up. If this presents a hazard, disconnect any devices on the other end of the cable until settings have been made and tested.

### **Features**





## **Setting**

See example diagram for method of setting. Note that the relay de-energizes when flow *falls below* the set point.

Connect Power. If using the power cord provided, wait to plug it in until after the front panel has been replaced. Terminal connection is only necessary for conduit installations. Remove the power cord provided and connect power, following the Connections diagram. Do not energize the circuit until the front panel has been replaced.

**Replace Front Panel.** Reverse the removal procedure.

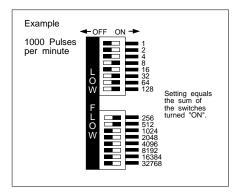
**Determine Trip Points.** Trip point frequencies are in pulses per minute. To calculate, multiply the pulses per gallon provided by the meter ("K-factor") by the gallons per minute at which the alarm output is desired.

Example: The meter produces 50 pulses per gallon. Relay Output is desired at 20 gallons per minute.

50 pulses/gallon X 20 gallons per minute = 1,000 pulses/minute

Set Low Flow to 1,000.

**Set Trip Points.** The DIP switches under the front clear cover are used to set trip point frequencies.





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