

Installation and Adjustment Instructions

Flo-Gard™

1. Installation

Observe the flow direction arrow on the body. Install in the pipeline with the proper flow direction, taking care to install in a location which will remain full for liquid installation.

Loosen, but do not remove the #6-32X1/4 Phillips Pan HD screw which secures the enclosure cap. Twist the cap slightly counterclockwise and pull cap off to gain access to the terminal strip and adjustment screws. Connect wiring through the provided hole in the cap and connect to terminal strip. Provide sufficient service loop to permit removal and reinstallation of cap without disconnecting wiring.

If fitted with two switches, each switch is independently settable. Choose normally open or closed as desired to provide fail safe operation.

Adjustments

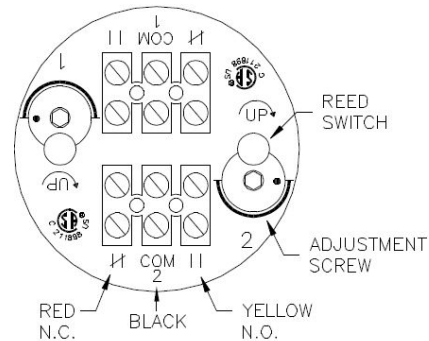
2. Adjustments are made by rotating the adjustment screw clockwise to raise the set point or counterclockwise to lower the set point. Use the **Green** mark on the adjustment disc as a reference. Factory setting is at 30% of full scale for switch #1 and 95% of full scale for switch #2. **Important:** Clockwise from standard factory setting.

Adjustment Screw Turns	% of Full Scale
0	30
1/2	60
1	80
1 1/2	90
2	100

To set switches accurately, connect a continuity tester to common and the selected normally open or normally closed contact. Establish flow at the desired set point and turn the adjustment screw until switching occurs. Increase and decrease the flow rate and verify desired set point switching.

Ratings

3. Contact Rating 10 watts
 Voltage 175Vdc max.
 125Vac max.
 Current 350mA max switching



Ratings based on resistive loads.
 Contact factory for recommendations when switching inductive loads.

Reed Switch Contact Protection

4.

When switching inductive loads such as relays, solenoids and transformers, reed switch contacts require protection in order to ensure long, dependable life. When contacts open, the inductance or electrical inertia of the load generates a large high frequency voltage which appears across the switch contacts. If the voltage is large enough, it can arc, causing the contacts to burn, weld together or stick. The purpose of protecting the circuit is to prevent arcing by shorting this voltage through an alternate path.

Important:

- Don't be misled by the resistive rating of the switch. Most applications involve inductive loads.
- Don't be misled by the wattage rating of the load. Low wattage loads are often high inductive devices, making contact protection important.

DC

A 1N4004 diode (or equivalent) should be connected in series with the reed switch as shown in figure 1

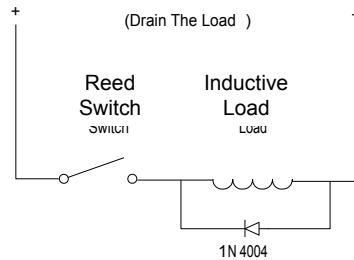


Figure 1
DC Contact Protection

AC

Connect a resistor and capacitor in parallel with the switch. Transient suppressors or varistors may also be used to dissipate the transient and protect the switch.

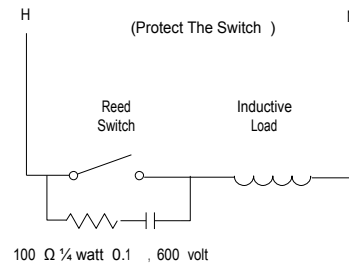


Figure 2
AC Contact Protection

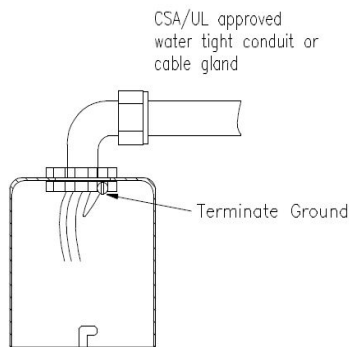


Figure 3
Wiring Termination

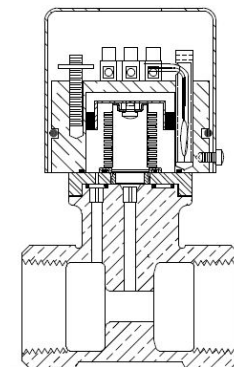


Figure 4
Cutaway View