# Installation and Calibration Instructions

Flo-Gard II w/ 1S2 or 2S2 Switches (General Purpose)

## 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 (closed loop system) installation can be mounted in any direction.

Loosen the 4 #6-32 flat head screws that secure the cover. Remove the cover to gain access to the terminal strip and adjustment screws. Connect wiring through the provided hole in the housing and connect to terminal strip. Recommend 1/2" water tight conduit or cable gland.

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

## **Adjustments**

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 set at 30% of full scale for switch #1 and 90% of full scale for switch #2. *Important:* Rotating clockwise moves the set point upscale. See chart below for % of full scale setting.

Adjustment Screw Turns	% of Full Scale
0 (factory setting)	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

Contact Rating	10 watts
Voltage	175Vdc max.
	125Vac max.
Current	350mA max switching
Hysteresis	13% F.S.

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

# Calibration Procedure:

Re-calibration of the switches can be performed in the field using a continuity tester, multimeter with buzzer or indicator light.

Below is the calibration procedure for a 1S2 reed switch option using an indicator light for testing the continuity.

#### Normally Open Contacts:

When wired using to the N.O. (Normally Open Contact) turn the adjustment screw clockwise until the switch stops, the light should be ON.

Turn the adjustment screw counterclockwise until the light goes OFF, continue turning the screw until the light just comes ON again and stop.

Turn the adjustment screw clockwise until the green dot (reference mark) is facing 3:00 o'clock (closest to the terminal strip). The light should be OFF this is approximately 30% of the full scale flow rate.

Important: Rotating clockwise moves the set point upscale.

### Normally Closed Contacts:

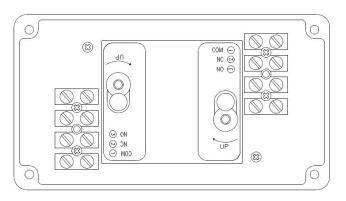
When wired using to the N.C. (Normally Closed Contact) turn the adjustment screw clockwise until the switch stops, the light should be OFF.

Turn the adjustment screw counterclockwise until the light comes ON, continue turning the screw until the light just goes OFF again and stop.

Turn the adjustment screw clockwise until the green dot (reference mark) is facing 3:00 o'clock (closest to the terminal strip). The light should be ON this is approximately 30% of the full scale flow rate.

*Important:* Rotating clockwise moves the set point upscale.

Repeat the above procedures when ordered with two switches (2S2 Option) refer to the adjustment chart 2.0 for the number of turns required to obtain 90% of the full scale flow rate. Replace the cover and secure using 4 #6-32 flat head screws.



**Top View**