



# OPERATING INSTRUCTIONS

## CALFLO™ CFSG

FLOW & TEMPERATURE THERMAL MASS FLOW SWITCH



## Installation and Instructions

Install the CFSG by inserting the 1/2" MNPT threaded sensor tip into a tapped pipe or T-fitting. Use Pipe Tape or Plumbers Putty on NPT threads to aid in sealing. Tighten firmly, but do not over tighten as this could damage the NPT threads and prevent proper sealing.

With provided connection cable disconnected, complete unit wiring by connecting the Brown wire to +24VDC supply and the Blue wire to common. The Black wire is now connected to the + side of your load. The - side or common of your load is now also connected to ground. NOTE: Be sure that the common (ground) of the SwitchGuard and the LOAD are the same. The white wire (if present) is not used.

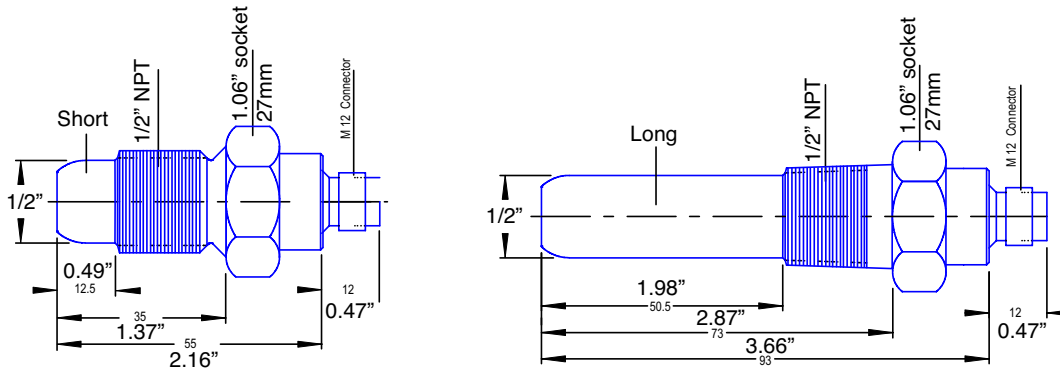
Upon initial power-up the unit will provide a temporary output as the unit is adjusting to the zero flow rate of the media. After approximately 10-15 seconds the output will turn off. Once the unit output has turned off, the unit is ready for operation. Once the threshold of the unit set point (approx. 1-1.3 feet/second) is reached the output will turn on.

As the CFSG unit also monitors the media temperature, the unit will provide a loss of signal if the temperature of the media goes above the threshold of the unit temperature set point (typically 122°F or 158°F), even with proper media flow.

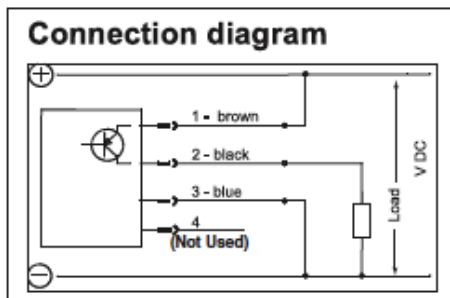
**Note: Use caution while installing the CFSG so as not to damage the tip of the sensor. The electronics are embedded just behind the tip of the CFSG and denting or bottoming out of the tip could cause damage.**

Maintenance is not required, as the CFSG has no moving parts. However, should the sensor become coated after a period of time in operation due to water or media conditions, simply wipe the probe with a soft cloth and alcohol.

## Dimensions In (mm)



## Wiring Diagram



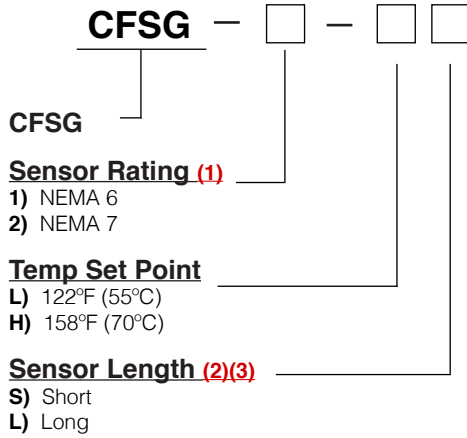
# Ordering Information

## FLO-CORP MODEL NUMBER BUILDER

For Assistance Call **877.356.5463**

Use the diagram below, working from left to right to construct your FLO-CORP Model Number.  
Simply match the category number to the corresponding box number.

**Example: CFSG-1-LS** CalFlo™ CFSG Flow & Temperature Thermal Mass Switch, NEMA 4 rating, 122°F set point, short sensor length.



### Ordering Notes:

- (1) Select the best configuration based on your requirements. Classifications for each type:  
CFSG-1: NEMA 6 - General Purpose (Comes with 6.5' PVC cable)  
CFSG-2: NEMA 7 - Hazardous Proof
- (2) Select the short sensor for use with pipe sizes ½" to 1½" in diameter and the long sensor for 2" and up.
- (3) This unit comes standard with NPT (US) threaded connections. To special order BSP (Metric) connections, place BSP at the end of the P/N: (ie CFSG-1-LS-BSP).