

# AFS-222 PRESSURE SWITCH

- Please read these instructions before you begin installation.

## INSTALLATION

**Mounting** Select a mounting location which is free from vibration. The AFS-222 must be mounted with the diaphragm in any vertical plane in order to obtain the lowest specified operating set point. Avoid mounting with the sample line connections in the UP position. Surface mount via the two 3/16" diameter holes in the integral mounting bracket. The mounting holes are 3-7/8" apart.

**Air Connection** The AFS-222 is designed to accept firm wall sample lines of 1/4" O.D. tubing by means of ferrule and nut compression connections. An optional adaptor suitable for slip on flexible tubing is available.

For sample lines up to 10 feet, 1/4" O.D. tubing is acceptable. For lines up to 20 feet use 1/4" I.D. tubing. For lines up to 60 feet use 1/2" I.D. tubing.

Locate the sample probe a minimum of 1.5 duct diameters downstream from the air source. Install the sampling probe as close to the centre of the air stream as possible.

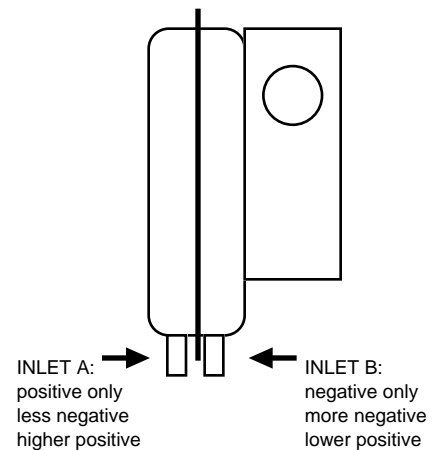
**POSITIVE PRESSURE ONLY:** Connect the sample line to inlet A; inlet B remains open to the atmosphere.

**NEGATIVE PRESSURE ONLY:** Connect the sample line to inlet B; inlet A remains open to the atmosphere.

**TWO NEGATIVE SAMPLES:** Connect the higher negative sample to inlet B. Connect the lower negative sample to inlet A.

**TWO POSITIVE SAMPLES:** Connect the higher positive sample to inlet A. Connect the lower positive sample to inlet B.

**ONE POSITIVE AND ONE NEGATIVE SAMPLE:** Connect the positive sample to inlet A. Connect the negative sample to inlet B.



## Electrical Connection



Before pressure is applied to the diaphragm, the switch contacts will be in the normally closed (NC) position.

The snap switch has screw top terminals with cup washers. Wire alarm and control applications as shown above.

## Field Adjustment

The adjustment range of an AFS-222 Air Switch is 0.05 to 12.0"w.c., +/-0.02"w.c. To adjust the set point: Turn the adjusting screw counterclockwise until motion has stopped. Next, turn the adjusting screw 4 complete turns in a clockwise direction to engage the spring. From this point, the next ten turns will be used for the actual calibration, Each full turn represents approximately 1.2" w.c.

Please note: To properly calibrate an Air Switch, a digital manometer or other measuring device should be used to confirm the actual set point.