



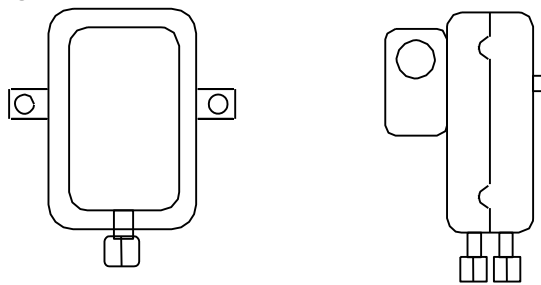
Installation and Operation Instructions ACI/AFS-222, ACI/AFS-262

PLEASE READ THE FOLLOWING INFORMATION BEFORE INSTALLATION!

• MOUNTING

Select a location which is free from vibration. The ACI/AFS Series pressure switches **must** be mounted in any vertical plane in order to be able to reach the lowest specified operating set point. Avoid mounting with the sample line connections in the “up” position. Surface mount via the (2) 3/16” diameter holes in the integral mounting bracket. The mounting holes are 3 7/8” apart. See Figure #1

Figure #1



• AIR SAMPLING CONNECTION

The ACI/AFS is designed to accept firm-wall sample lines of 1/4” O.D. tubing by means of a ferrule and nut compression fitting. An optional 1/4” adaptor, suitable for slip-on flexible tubing is available. For sample lines of up to 10 feet, 1/4” O.D. tubing is acceptable and for lines up to 20 feet, use 1/4” I.D. tubing. For lines from 20-60 feet, use a 1/2” I.D. tubing. A 1/4” O.D. Adaptor, suitable for slip-on flexible tubing is available (Part# 18311). Locate the sampling probe a minimum of 1.5 duct diameters downstream from the air source. Install the sampling probe as close to the center of the airstream as possible. Refer to figure #2 to identify the high pressure inlet (A) and the low pressure inlet (B). Select one of the 5 application options listed below, and connect the sample line as recommended.

Positive Pressure Only: Connect the sample line to inlet A; inlet B remains open to the atmosphere.

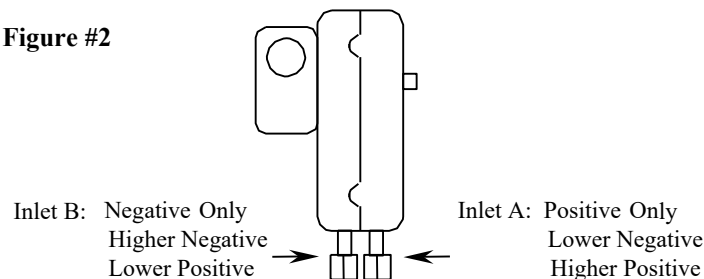
Negative Pressure Only: Connect the sample line to inlet B; inlet A remains open to the atmosphere.

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.

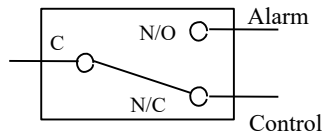
Figure #2



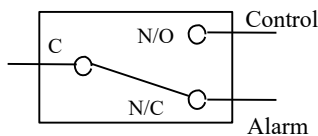
• ELECTRICAL CONNECTIONS

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 in Figure #4.

Figure #4 To prove excessive air flow or pressure:



To prove insufficient air flow or pressure:



• FIELD ADJUSTMENT

The adjustment range of the ACI/AFS-222 Air Switch is 0.05 to 12.0" w.c. +/- 0.02" w.c. Whereas the adjustment range of the ACI/AFS-262 Air Switch is 0.05 to 2.0" w.c. +/- 0.02" w.c.

To adjust the Set point: Turn the adjusting screw counterclock-wise until the motion has stopped. Next, turn the adjusting screw 4 complete turns in a clock-wise direction to engage the spring. From this point, the next 10 turns will be used for the actual calibration.

AFS-222: Each full turn represents approximately 1.2" w.c..

AFS-262: Each full turn represents approximately 0.2" 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.