

**Negative Pressure Only:** Connect the sample line to inlet L; inlet H remains open to the atmosphere.

**Two Negative Samples:** Connect the higher negative sample to inlet L. Connect the lower negative sample to inlet H.

**Two Positive Samples:** Connect the higher positive sample to inlet H. Connect the lower positive sample to inlet L.

**One Positive and One Negative Sample:** Connect the positive sample to inlet H. Connect the negative sample to inlet L.

## ELECTRICAL CONNECTIONS (FIGURES 3 & 4)

Before pressure is applied to the diaphragm, the switch contacts will be in the normally closed (NC) position. Wire control and alarm functions as shown in Figure 4.

## FIELD ADJUSTMENT

The adjustment range of an RFS-4150 Air Switch is 0.15±0.02" wc to 5.0" wc.

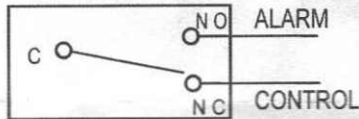
To adjust the set point, turn the adjusting screw counterclockwise until motion has stopped. Next, turn the adjusting screw 5 complete turns clockwise to engage the spring.

From this point, the next eight turns will be used for the actual calibration. **Each full turn represents approximately 0.61" wc.**

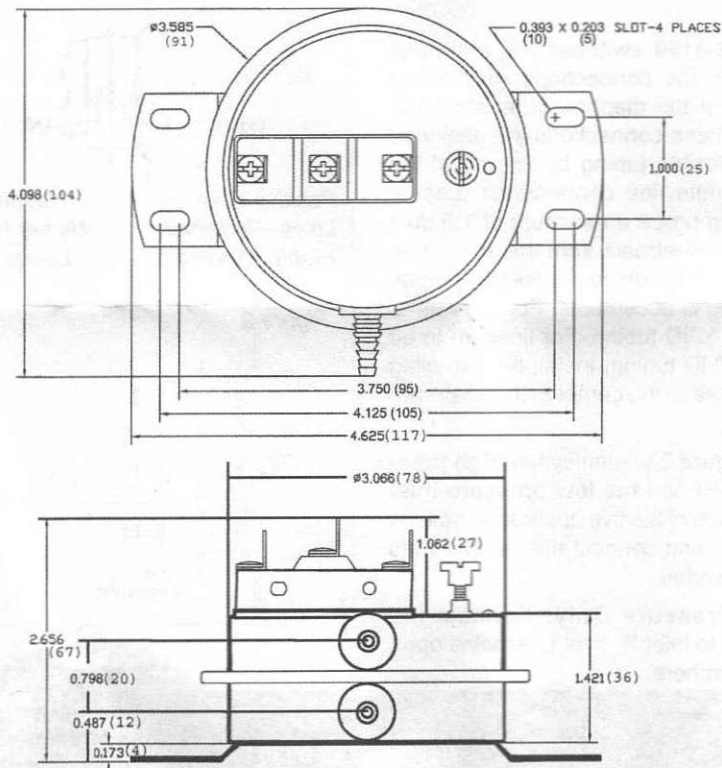
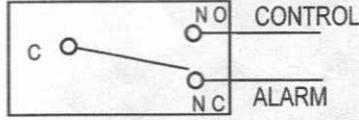
**Please note:** To properly calibrate an air switch, a digital manometer or other measuring device should be used to confirm the actual set point.

Figure 4

To prove excessive air flow or pressure:



To prove insufficient air flow or pressure:



Reference Dimensions in Inches (Millimeters)

## SPECIFICATIONS

### MODEL RFS-4150

AIR PRESSURE SENSING SWITCH  
WITH ADJUSTABLE SET POINT RANGE

#### Mounting Position:

Mount with the diaphragm in any vertical plane.

#### Standard Set Point Range:

0.15 ± 0.02" wc to 5.0" wc.

#### Field Adjustable "Operate Range":

0.17" wc to 5.0" wc.

#### Field Adjustable "Release Range":

0.14" wc to 4.7" wc.

#### Approximate Switch Differential:

Progressive, increasing from 0.05±0.02" wc at minimum set point to approximately 0.3" wc at maximum set point.

#### Measured Media:

Air or combustion by-products that will not degrade silicone.

#### Maximum Pressure:

½ psi (0.03 bar).

#### Operating Temperature Range:

-40 to 180F (-40.0 to 82.2C).

#### Life:

100,000 cycles minimum at ½ psi maximum pressure each cycle and at maximum rated electrical load.

#### Electrical Rating:

300 VA pilot duty at 115 to 277 VAC;  
15 amp noninductive to  
277 VAC, 60 Hz.

#### Contact Arrangement:

SPDT.

#### Electrical Connections:

¼", 90° quick-connect terminals.

#### Sample Line Connectors:

Tri-barb connectors for ⅜",  
¼", and ⅙" ID tubing.

#### Approvals:

UL, CUL.

#### Shipping Weight:

7.5 oz.