

ANS2 SERIES ADJUSTABLE AIR PRESSURE SWITCH INSTALLATION MANUAL



**THIS PRODUCT MUST BE INSTALLED BY
A CERTIFIED HVAC TECHNICIAN**

TABLE 1: ANS2 KIT CONTENTS

CCI MODEL #	DESCRIPTION	QTY.
ANS2-1000-00 ANS2-2000-00 ANS2-3000-00	Air Switch	1
61517	Mounting Bracket	1
61518001	0.010" Dia Orifice (Green)	2
61518002	0.016" Dia Orifice (Gray)	2
61518003	0.028" Dia Orifice (Red)	2
61518004	0.035" Dia Orifice (Blue)	2
T03.188.313-2	2 Ft of $\frac{3}{16}$ " ID Silicone Tubing	1

A. Unpacking

- Carefully remove the ANS2 switch and any included components from the packaging.
- Inspect for any damage and ensure all pieces are included before assembly.

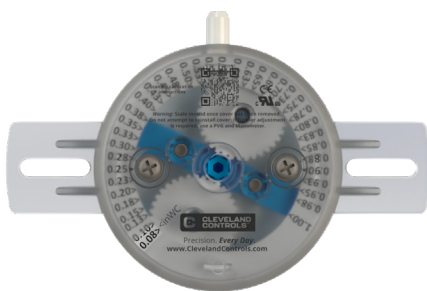


Figure 1 Viewing Window ANS2-1000

B. Switch Adjustment

- Use a $\frac{7}{64}$ " Allen key in the keyhole to adjust the set point viewable in the adjustment cover viewing window as shown in Figure 1.
- Turn clockwise to increase the set point; counterclockwise to decrease.
- For highest accuracy turn clockwise to a point above the required set point, and then counterclockwise back to the required setting.

Hard stops indicate mechanical adjustment limits. **Damage can occur if mechanical adjustment limits are exceeded.**

The scale indicates the set point for pressure rise operation in the standard vertical orientation (ports facing down). For horizontal orientation or pressure fall operation see Table 2.

Using Table 2, adjust set point calibration to account for orientation and/or operation-related deviation.

*The ANS2-1000 series switches do not support horizontal orientation.

Note: Field validation is recommended if the exact set point is critical.

C. Adjustment Cover Removal (Optional)

The switch may be installed without its adjustment cover if space is limited:

WARNING: ONCE ADJUSTMENT COVER IS REMOVED, THE SCALE IS NO LONGER VALID IF REATTACHED.

- Remove the two mounting screws to detach the adjustment cover.
- A **PVG and manometer** must be used for accurate calibration.

D. Mounting Instructions

- Select a mounting location free from vibration. Mount with the diaphragm in any vertical plane. See Table 2 if intending to mount horizontally. Do not mount with the sample line connections directed upward.
- Refer to Figure 2 for the mounting dimensions of the integral foot bracket. Using two slotted hex mounting screws (not included), mount the calibrated ANS2 switch via the integral foot bracket.
- If the adjustment cover is removed, the switch will need to be mounted with a separate bracket. The ANS2 Kit includes a mounting bracket for use after the adjustment cover is removed.

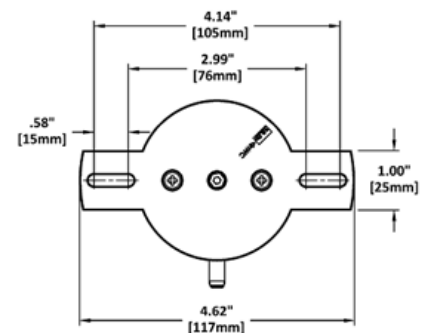


Figure 2 Integrated Mounting Foot Dimensions

E. Electrical Connections

The switch has three $\frac{1}{4}$ " x .032" 90° male quick connect spade terminals. Connect them to the corresponding application wire terminals and apply power.

TABLE 2: SCALE OFFSET TABLE

Model	Positive pressure reading if:	Negative Pressure Port reading if:					Horizontal installation		Pressure fall
	Positive port with orifice	No orifice	Orifice type	Orifice in positive port	Orifice in negative port	Orifice in both ports	Terminals up	Terminals down	
ANS2-1000-XX(K)	0	0	Green	0	0.015	0.02	N/A*	N/A*	-0.02
			Grey			0.015			
			Red						
			Blue						
ANS2-2000-XX(K)	0	0	Green	0	0.26	0.29	-0.08	0.08	-0.05
			Grey		0.02	0.02			
			Red						
			Blue						
ANS2-3000-XX(K)	0	0.06	Green	0.06	0.33	0.33	-0.09	0.09	-0.09
			Grey		0.22	0.22			
			Red		0.2	0.2			
			Blue		0.19	0.19			

*The ANS2-1000 series switches do not support horizontal orientation.



CARBON MONOXIDE (CO) GAS EXPOSURE CAN CAUSE BRAIN DAMAGE OR DEATH

This pressure switch may control air flow into the combustion chamber. Improper adjustment of the pressure switch in the field, or use of the switch for an application for which it was not intended, may introduce carbon monoxide into the ventilation system or combustion chamber.

The U.S. Consumer Product Safety Commission warns that carbon monoxide gas is an "invisible killer." Carbon monoxide (CO) is a colorless, odorless, deadly gas produced by burning fuel, including natural gas and propane. Symptoms of carbon monoxide exposure include dizziness, headache, nausea, weakness, sleepiness, muscle twitching, vomiting and inability to think clearly. If you experience these symptoms, turn the HVAC system off, exit the building, and get into fresh air immediately. The pressure switch must be tested thoroughly by an HVAC professional before the HVAC system is restarted. Proper installation, operation and maintenance of fuel-burning appliances and HVAC systems is the most important factor in reducing carbon monoxide poisoning. For safe operation, be sure all such devices are installed by professionals and operated according to manufacturer's instructions and applicable local codes. Have HVAC systems (including pressure switches) inspected and serviced annually by a trained service technician. Examine vents regularly for improper connections, visible cracks, rust or stains, and blockage. Install battery-operated carbon monoxide alarms certified to the requirements of the most recent UL, AS and CSA standard for carbon monoxide alarms. Test the alarms regularly and replace the batteries annually.