



# INTERFACE SERIES

Installation & Operation Instructions  
SW1

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## GENERAL INFORMATION

The SW1 is a three-way pneumatic solenoid valve activated by a 24 VDC or VAC electric signal. The miniature valve is light weight, energy efficient, and capable of continuous duty. The LED indicates power to the valve. The valve is equipped with two plastic barbs and one metal barb, all of which accept 5/32" OD polyethylene or PVC tubing. A jumper shunt is mounted in series with the incoming power to allow local OFF override.

## MOUNTING INSTRUCTIONS

The interface device may be mounted in any position. If circuit board slides out of snap track, a non-conductive "stop" may be required. Use only fingers to remove board from snap track. Slide out of snap track or push against side of snap track and lift that side of the circuit board to remove. Hold the valve in one hand when installing tubing to prevent stress on board. **Do not flex board or use tools.**

## WIRING INSTRUCTIONS

### PRECAUTIONS

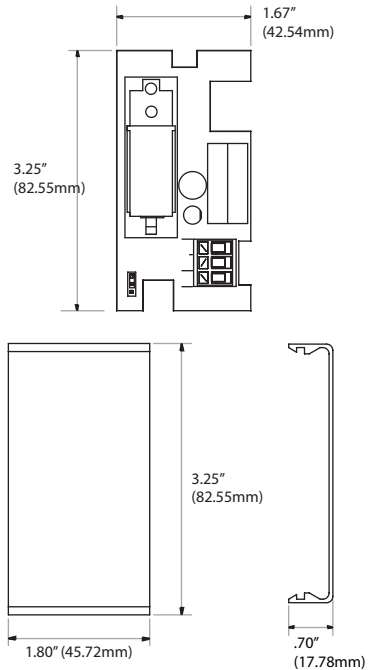
- **Remove power before wiring. Never connect or disconnect wiring with power applied.**
- **When using a shielded cable, ground the shield only at the controller end. Grounding both ends can cause a ground loop.**
- **It is recommended you use an isolated UL-listed class 2 transformer when powering the unit with 24 VAC. Failure to wire the devices with the correct polarity when sharing transformers may result in damage to any device powered by the shared transformer.**
- **If the 24 VDC or 24VAC power is shared with devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV, DC/AC Transorb, Transient Voltage Suppressor (ACI Part: 142583), or diode placed across the coil or inductor. The cathode, or banded side of the DC Transorb or diode, connects to the positive side of the power supply. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits.**
- **All wiring must comply with all local and National Electric Codes.**

Make electrical connections as follows:

1. Connect signal to either of the signal (SIG) terminals.
2. Connect the Common of the electrical signal to the terminal marked COM.

Apply signal to SIG and COM terminals. The unit may be warm to the touch when signal is applied for a sustained period of time.

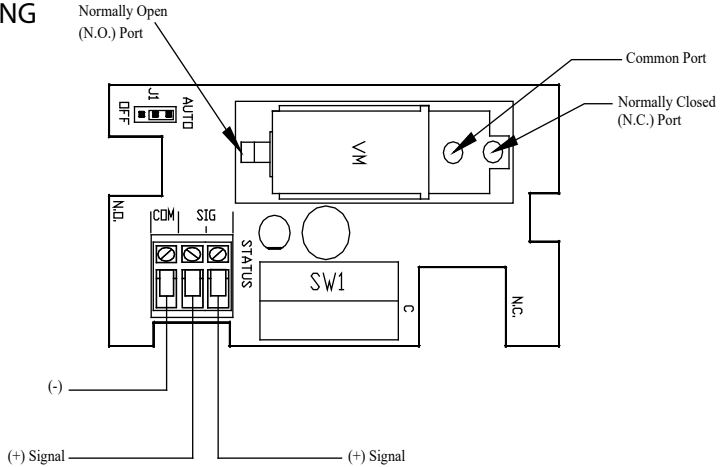
FIGURE 1: DIMENSIONS



With the jumper in the AUTO position and signal applied, LED should be ON and SW1 will allow air to flow from Common to N.C. port.

With jumper in the OFF position or when signal is removed, the LED should be off and air should flow between the Common and N.O. port.

**FIGURE 2: WIRING**



**PRODUCT SPECIFICATIONS**

SENSOR NON-SPECIFIC INFORMATION	
<b>Supply Voltage:</b>	24 VAC or 24 VDC, +/- 10%
<b>Supply Current:</b>	95 mA maximum (AC), 47 mA maximum (DC)
<b>Supply Pressure:</b>	35 psig maximum (241 KPa)
<b>Output Pressure:</b>	Same as Supply
<b>Air Flow Rate:</b>	1200 scim @ 20 psig (19.67 slpm)
<b>Pneumatic Tubing Size:</b>	5/32" O.D. (1/8" I.D.) Polyethylene or PVC Tubing
<b>Operating Temperature Range:</b>	-10 to 150°F (-23 to 65.56°C)
<b>Operating Humidity Range:</b>	5 to 95% non condensing
<b>Connections:</b>	90° Pluggable Screw Terminal Blocks
<b>Wire Size:</b>	16 (1.31 mm <sup>2</sup> ) to 26 AWG (0.129 mm <sup>2</sup> )
<b>Terminal Block Torque Rating:</b>	0.5 Nm (Minimum); 0.6 Nm (Maximum)
<b>Storage Temperature:</b>	-10 to 150°F (-23.3 to 65.5°C)

**WARRANTY**

The Interface Series are covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI'S SENSORS & TRANSMITTERS CATALOG or can be found on ACI's website: [www.workaci.com](http://www.workaci.com).

**W.E.E.E. DIRECTIVE**

At the end of their useful life the packaging and product should be disposed of via a suitable recycling centre. Do not dispose of with household waste. Do not burn.

