

0 to 100 PSIG Pressure Sensor with Proportional Analog Current or Voltage Output

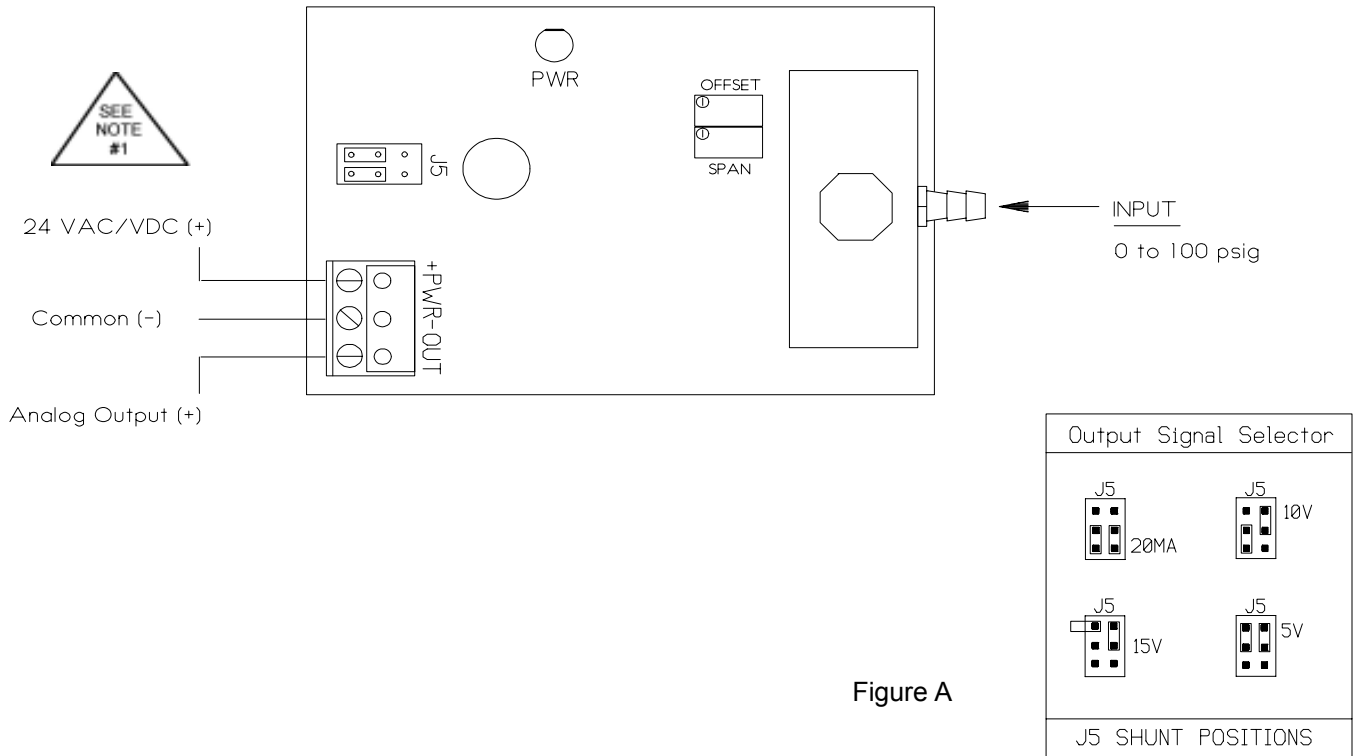


Figure A

INSTALLATION

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION.

Ground yourself before touching board. Some components are static sensitive.

MOUNTING:

Circuit board may be mounted in any position. If circuit board slides out of snap track, a nonconductive "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. Do not flex board or use tools.

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION.

Ground yourself before touching board. Some components are static sensitive.

MOUNTING:

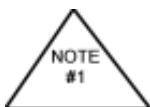
Circuit board may be mounted in any position. If circuit board slides out of snap track, a nonconductive "stop" may be required. Use only fingers to remove board from snap track. Slide out of snap track or push against side of snap track and lift that side of the circuit board to remove. Do not flex board or use tools.

POWER CONNECTIONS - THIS PRODUCT ACCEPTS 24 VOLTS AC OR DC POWER

BE SURE TO FOLLOW ALL LOCAL AND ELECTRICAL CODES. REFER TO WIRING DIAGRAM FOR CONNECTION INFORMATION.

1) **24 VDC** - with power off, connect 24 volt DC power supply to terminals PWR (+) and PWR (-) on the board.

24 VAC - with power off, connect one transformer secondary leg to the PWR (+) on the board. Connect the other transformer secondary leg to PWR (-). Check the wiring configuration of any other loads that may be connected to this transformer.



If required by BAS or controller specification, the 24 VAC neutral can be earth grounded at the transformer. Analog input, digital input, and analog output circuits should not be earth grounded at two points. Any field device connected to this transformer must use the same common. If you are not sure of other field device configuration, use separate transformers for isolation.

- 2) **If the 24 volt DC or AC power is shared** with other devices that have coils such as relays, solenoids, or other inductors, each coil must have a diode or DC Transorb (if DC), a MOV or AC Transorb (if AC), or other spike snubbing device across each of the shared coils. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits.
- 3) You should measure the actual voltage output of the secondary. If the output is not fully loaded you may read a higher voltage than the circuit board can handle.

The gauge port will accept a miniature 1/8" FNPT back-ported pressure gauge to allow direct reading of input pressure. The gauge should be sealed with Teflon sealing tape. A backup wrench should be used to hold the manifold when installing gauge.

The surface between the manifold and pressure transducer is a pressure seal. Do NOT stress the circuit board or allow the manifold to move. Hold the manifold in one hand while installing pneumatic tubing onto the fitting and use care when removing tubing to avoid damaging fitting or moving manifold.

Field calibration voids warranty.

SETUP

With power off, select jumper position on jumper block J5 corresponding to the output required (see Figure A, page 1).

CHECKOUT

Connect pressure source to be sensed to the barbed fitting on the PTP100 manifold with 1/4" O.D. polyethylene tubing, and clamp securely.

Apply power to terminals "PWR" (+) and (-). The PTP100 will begin tracking and responding to the pressure input signal instantly. Apply minimum and maximum pressure and measure response. Check test meter for proper scale selection and correct lead connection. Response between the minimum and maximum values will be linear, therefore software algorithms should be easy to derive.

Power Supply: 24 VDC (+/- 10%) or 24 VAC (+/- 10%)	Output Load Impedance:
Power Consumption: 50 mA	Current: 4 to 20 mA/500 ohms max.
Pneumatic Input Signal: 20 to 100 psig	Voltage: 1 to 5 VDC/250 ohms 2 to 10 VDC/500 ohms 3 to 15 VDC/750 ohms
	Accuracy: 1 % full scale at room temperature 2% full scale across operating temperature range