

Figure 1: A/MLP Dimensions and Hardware

## PRECAUTIONS

- Remove power before wiring. Never connect or disconnect wiring with the power APPLIED. DO NOT ALLOW LIVE WIRES TO TOUCH THE CIRCUIT BOARD.
- AN ISOLATION TRANSFORMER IS RECOMMENDED WHEN POWERING THE DEVICE WITH 24VAC.
- DO NOT RUN THE WIRING IN ANY CONDUIT WITH LINE VOLTAGE.
- FAILURE TO WIRE DEVICES WITH THE CORRECT POLARITY WHEN USING A SHARED TRANSFORMER MAY RESULT IN DAMAGE TO ANY DEVICE POWERED BY THE SHARED TRANSFORMER.
- DO NOT REMOVE THE COVER. ALL USER FEATURES ARE ACCESSIBLE FROM THE OUTSIDE OF THE UNIT


## MOUNTING

Two size \#10 screws are recommended. Mount the unit vertically with the brass fittings pointing towards the ground. Attach the unit to the mounting surface using the two mounting holes located on the top and bottom flanges. This ensures that any condensation that may form in the tubing does not have an effect on the pressure sensor.

## WIRING

Shielded cable with 16 to 22AWG conductors is recommended. Use the Wiring Connections table below to determine the proper wiring for your application. Insert the wire into the depluggable terminal block sockets and tighten the screws. In some circumstances, it may be easier to remove the terminal blocks while connecting the wires.

| Output Signal | Supply Voltage | Wire Connections |  |  |
| :---: | :---: | :---: | :---: | :---: |
| VDC | AC/DC | VIN | GND | OUT |
| mA | AC | VIN | GND | OUT |
| mA | DC | VIN |  | OUT |

Table 1: Wiring Connections

## PRESSURE CONNECTIONS

The recommended connection tubing is $1 / 4 "$ push-on tubing ( $1 / 8$ " $-3 / 16$ " I.D.).

## AUTO ZERO

The Auto Zero adjustment should only be performed with no pressure applied.
Small positive or negative pressure offsets can be removed using the Auto/Zero push button. Make sure that there is no pressure at the HI and LO pressure fittings. Additionally, a small piece of tubing can be connected between the HI and LO brass fittings to neutralize any external pressure effects. Press and hold the Auto/Zero button for 6 seconds.

## ADVANCED FEATURES

FACTORY RESET - Press and hold the Span and Auto/Zero buttons for 6 seconds. This will restore the factory calibration and remove any zero or span adjustments that have been applied in the field.

ZERO (OFFSET) ADJUST - Manually adjust small positive or negative pressure offsets by using the Zero Adjust feature. Press and hold the Auto/Zero button for 2 second and release. Then use the Up and Down buttons to obtain the desired output. The output will stop changing when the limits have been reached. After 3 seconds the unit will resume normal operation.

SPAN (GAIN) ADJUST - Manually adjust the span using the Span Adjust feature. The span can be modified against a known reference at any point within the range although it is best done at the sensor's full scale pressure. Press and hold the Span button for 2 second and release. Then use the Up and Down buttons to obtain the desired output. The output will stop changing when the limits have been reached. After 3 seconds the unit will resume normal operation.

DIAGNOSTIC MODE - The diagnostic mode can be used to help prove out a system by simulating $0 \%, 50 \%$ and $100 \%$ output, i.e. for a $4-20 \mathrm{~mA}$ unit, you can simulate 4,12 and 20 mA . Hold down the Span button for 6 seconds. Then use the Up and Down buttons to select the desired mode. The unit will resume normal operation after 2 minutes. Press the Span and Auto/Zero buttons to return to normal operation immediately.

## PRODUCT SPECIFICATIONS

| Supply Voltage | 250 Ohm Load: 12-36 VDC / 24VAC 0-5 VDC: 12-36 VDC / 24VAC 500 Ohm Load: 15-36 VDC / 24VAC 0-10 VDC: 15-36 VDC / 24VAC |
| :---: | :---: |
| Supply Current | 23 mA minimum |
| Output | 2-wire, Linear 4 to 20 mA DC Current or 3-wire, 0-5 or 0-10VDC, or 4-20mA |
| Sensor Accuracy ${ }^{1}$ | +/-1\% FSO |
| Response Time | 500 mS |
| Operating Temperature Range | 32 to $140^{\circ} \mathrm{F}\left(0\right.$ to $60^{\circ} \mathrm{C}$ ) |
| Compensated Temperature Range | 32 to $122^{\circ} \mathrm{F}\left(0\right.$ to $50^{\circ} \mathrm{C}$ ) |
| Humidity | 0 to 95\% RH, non-condensing |
| Thermal Effects ${ }^{2}$ | +/-0.067\%FSO/ ${ }^{\circ} \mathrm{F}$ (+/-0.12\% FSO/ ${ }^{\circ} \mathrm{C}$ ) |
| Proof Pressure | $100 \mathrm{inWC}(24.9 \mathrm{kPa})$ for ranges $\leq 2 \mathrm{inWC}(0.5 \mathrm{kPa})$ $200 \mathrm{inWC}(49.82 \mathrm{kPa})$ for ranges $>2 \mathrm{inWC}(0.5 \mathrm{kPa})$ |
| Burst Pressure | ```300 inWC (74.65 kPa) for ranges \leq 10 inWC (2.5 kPa) 500 inWC (124.42 kPa) for ranges > 10 inWC (2.5 kPa) & < 30 inWC (7.5 kPa) 800 inWC (199.072 kPa) for ranges = 30 inWC (7.5 kPa)``` |
| Media | Dry air or inert non-conductive gases |
| Features | Depluggable terminal blocks <br> Push button Auto Zero <br> User adjustable Zero and Span <br> Diagnostic / Fixed Output Mode / Current limit 21mA |
| Enclosure | UL94-V0 rated, flame retardant ABS |
| Approvals | REACH RoHS WEEE |
| Note 1: Accuracy includes linearity, hysteresis and repeatability. Note 2: Shift is relative to $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$. |  |

Table 2: Product Specifications

