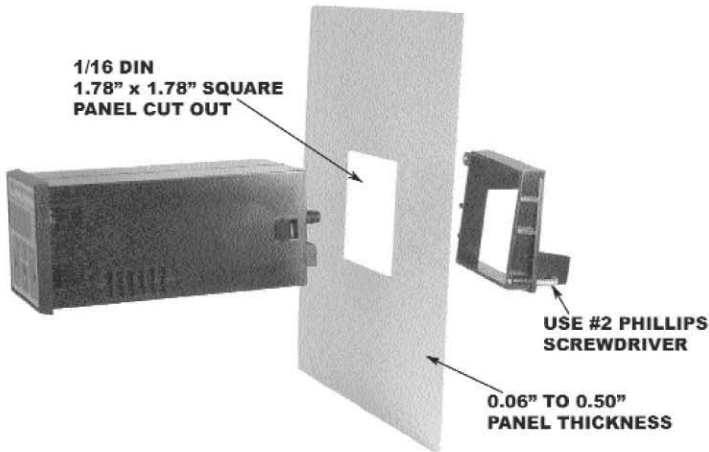




Installation and Maintenance Instructions Low Pressure Switching Monitor LPS Series

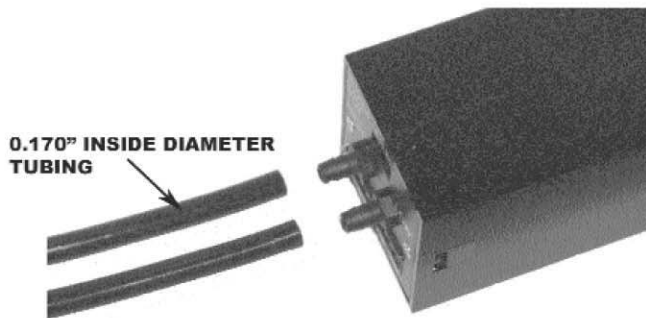
Mounting

The unit can be panel mounted in a 1.78" ± 0.01" (45.3 ± 0.3mm) square cutout (1/16 DIN 43 700). The retaining bracket should be installed after placement in the panel. The two phillips head screws should be tightened to secure the unit in the panel. The maximum panel thickness is 0.5" (12 mm).



Pressure Connections

The dual port units have a barbed tube fitting which will accept 0.170" ID flexible tubing. Pull on tube with an 8 oz. force to ensure proper installation



Installation and Maintenance Instructions Low Pressure Switching Monitor LPS Series

Electrical Connections

The electrical interface consists of a removable terminal strip. To make reliable connections, crimp ferrules (such as Panduit P/N F75-8-M for 22 gage wire) on the individual wires .

12 to 24 VDC or AC power is required on terminals 1 and 2, with the DC positive lead on terminal 1 (extreme left position).

Power consumption for each unit is 1.4 watts. The 3 and 4 terminals are used for the optional 4 to 20 mA loop analog current loop or 0 - 10 VDC output. The current loop should be powered with 15 to 30 VDC.

Terminals 5 and 6 are the **HIGH** process alarm relay connections and terminals 7 and 8 are the **LOW** process alarm relay connections. These are electrically (galvanically) isolated contacts. They provide form A contact functions with terminals closed during normal operating conditions.

A spade terminal lug on the rear left side of the unit should be connected to the mounting panel earth ground for proper EMC (Electro Magnetic Compliance) performance.

Time Delay

The time delay has been preset to 10 seconds. To change, pull the rear panel jumper straight back to remove and reinstall on the desired 1, 20, or 30 second time delay, as noted on the rear panel. With no jumper, the time delay will default to 30 seconds.

TO SET RESPONSE
DELAY CHANGE
JUMPER POSITION.



REAR PANEL TIME DELAY JUMPER

Installation and Maintenance Instructions LPS Series

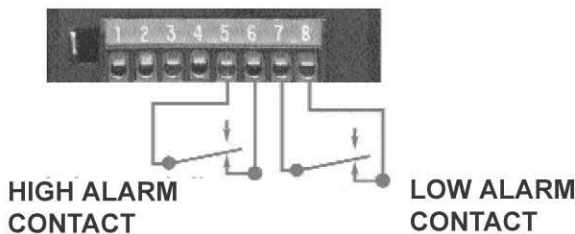
Installation and Maintenance Instructions LPS Series Process Alarm Limit Settings WARNING

HIGH LIMIT MUST BE ABOVE LOW LIMIT

To set the alarm limits, push the **LOW** (or **HIGH**) front panel button. The display will indicate the set point, which can be changed with a small phillips head screwdriver in the low (or high) alarm adjustment access hole. To exit the set mode, push the **LOW** (or **HIGH**) button a second time. If this is not done, the display will revert to the process measurement within one minute. The **LOW ALARM** and **HIGH ALARM** adjustment potentiometers are 15 turn devices with idle clutches at the end of travel at which point a slight click can be observed. Limits of adjustment are tabulated below for the various ranges.

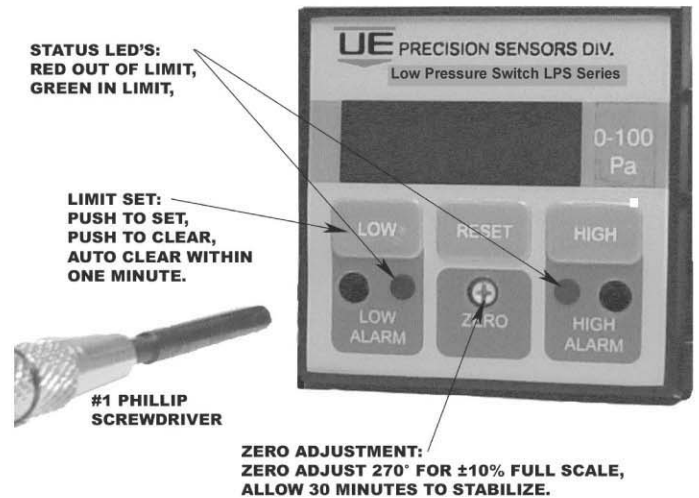
RANGE	LOW LIMIT	HIGH LIMIT
0.200"	-0.190	0.190
0.500"	-0.475	0.475
1.00"	-0.95	0.95
2.00"	-1.90	1.90
5.00"	-4.75	4.75
10.0"	-9.50	9.50
20.0"	-19.0	19.0
50.0"	-47.5	47.5
50 Pa	-47.5	47.5
100 Pa	-95	95
200 Pa	-190	190
500 Pa	-475	475
1000 Pa	-950	950
2.00 KPa	-1.90	1.90
10.0 KPa	-9.5	9.5
20.0 KPa	-19.0	19.0

Process Alarm Normal Powered Condition



Process Alarm Relay Output Function

The electrically isolated high and low alarm relays (Terminals 5-6 and 7-8) are closed during normal operation within limits. If the process goes out of limits, the front panel status LED will indicate the out of limit condition by turning red. After the preset time delay is reached, the unit will alarm by opening the relay contacts and flashing the display. If the process then goes within limits, the display continues to flash and the contacts remain open until the **RESET** button on the front panel is depressed to clear the alarm. The display will always show the actual process pressure. During an alarm condition, the relay will open and remain open until the **RESET** button on the front panel is pushed **and** the process returns to within limits. If the unit is still out of limits when the **RESET** is activated, the unit will remain in the alarm mode with the relay open until the process pressure returns to within the preset limits.

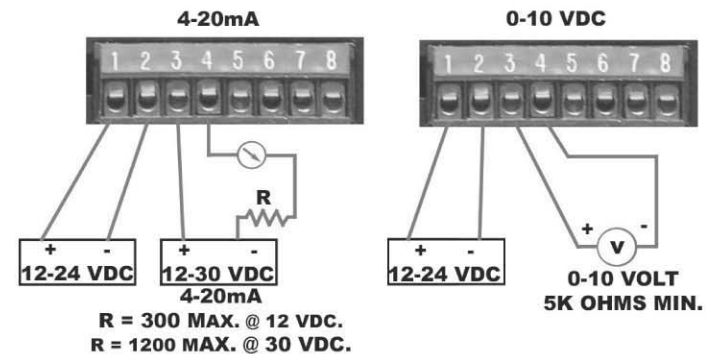


Zero Adjustment

After power has been applied for at least 30 minutes, the zero reading should be verified and adjusted if required. The center ZERO adjust potentiometer is a ¾ turn device and has a ±10% range of adjustment with a solid stop at the end of travel. Do not exceed 5 in-oz of torque on the part as it may be damaged. To verify the unit zero reading, remove the process pressure connection on the rear panel.

Analog Output Option Connections 4 to 20 mA Current Output

The 4 to 20 mA output is a current sink type. A 12 to 30 VDC loop power should be connected to terminals 3 and 4, with the positive voltage connected to terminal 3. The maximum loop resistance is 300 ohms at 12 VDC power and increases linearly to 1200 ohms at 30 VDC power.



0 to 10 VDC Voltage Output

The 0 to 10 VDC output is available across terminals 3 and 4 with terminal 3 being positive. The minimum load resistance is 5,000 ohms.

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