

# LOW PRESSURE SWITCHING MONITOR

Prevents Unwanted Shutdown

High and Low Limit Monitor

Measures Positive and Negative Pressure

Front Panel Validation with EASY CAL™





## LOW PRESSURE SWITCHING MONITOR



The Low Pressure Switching (LPS) Monitor measures differential pressure. High and

Low limit alarms are independently set from front panel with configurable low warning and low alarm settings.

LED display indicates the sensed pressure. When preset limit is exceeded, the LED signals an alarm condition by turning red. The adjustable "stand alone" time delay

prevents intermittent tripping due to brief transient upsets.

Four LPS monitors will fit in the same space as one older gauge/switch.

### **APPLICATIONS**

Hepa Filter Monitor and AlarmFume HoodsExhaust MonitoringLevel SensorCoating and Painting BoothControl PanelsClean Room Pressure MonitorHVAC SystemsVentilating SystemsFilling Systems

#### **SPECIFICATIONS**

Indicating Pressure Ranges: 0.2" to 50" WC (50 Pa to 20KPa) F.S. Media: Inert non-conductive gas or dry air

**Accuracy:** 1% of full scale at 20°C

Overpressure: ±14.5 psi (80"WC for under 1"WC ranges)

Operating Temperature:  $0^{\circ}\text{C to }40^{\circ}\text{C }(32^{\circ}\text{F to }104^{\circ}\text{F})$ Storage Temperature:  $-40^{\circ}\text{C to }60^{\circ}\text{C }(-40^{\circ}\text{F to }160^{\circ}\text{F})$ 

**Zero Adjustment:** Zero via front panel screw adjustment to  $\pm 10\%$  F.S.

**Display:** 3.5" digit, 0.30" high red LED

Analog Output: 4-20 mA current sinking or 0 to 10 VDC Enclosure: 1/16th DIN 43700, panel mounted

polycarbonate plastic case

Alarm Relay Contacts: Latching isolated form "A" high and low contacts,

1A @ 30VDC

Weight: 7.0 ounces (200 grams) max.

Power: 12-24 VAC/VDC, 1.4 watts

Wiring: Pluggable terminal block, 18-26 AWG

#### **FEATURES**



- Small 1/16 DIN size for easy panel mounting
- Selectable time-delay eliminates nuisance alarm
- LED display of process and high and low alarms
- Isolated form A contacts
- 4-20 mA or 0-10 VDC analog output
- Removable terminal block for 18-26 AWG wire
- Convenient power requirement 12-24 VAC/VDC
- Proven solid state sensors
- Analog circuit design eliminates potential microprocessor software problems
- Compliant with UL 508 and CE EN 61326 EMI requirements
- Compound ranges available
- Available ranges from 0.2" WC to 50" WC (50 Pascal to 20KPa)

#### **How To Order - LPS Product Designation Code**

Low Pressure Monitor — Differential pressure indicator with adjustable switch settings.

|  |                                  |                               | LPS          | 2W                   | N                | 42          | С                   | -M01                      |
|--|----------------------------------|-------------------------------|--------------|----------------------|------------------|-------------|---------------------|---------------------------|
| Build a part number by selecting appropriate codes for each feature category. Example: LPS2WN42C-M01 |                                  | Low-Pressure<br>Analog Switch | Range        | Туре                 | Analog<br>Output | Accessories | Option<br>Codes     |                           |
|  |                                  |                               |              | 2.0″H <sub>2</sub> 0 | Negative         | 4-20 mA     | Waterproof<br>Cover | Non-<br>Latching<br>Alarm |
| MODEL  | DESCRIPTION                      |                               |              |                      |                  |             |                     |                           |
| LPS  | 12-24 VDC/VAC, 100 mA, 1.4 Watts |                               |              |                      |                  |             |                     |                           |
| PRESSURE RANGES  | Inches H <sub>2</sub> 0          | Pascals                       |              |                      |                  |             |                     |                           |
| R2W  | 0.2                              | . 0300.3                      |              |                      |                  |             |                     |                           |
| R5W  | 0.5                              |                               |              |                      |                  |             |                     |                           |
| 1W   | 1                                |                               |              |                      |                  |             |                     |                           |
| 2W   | 2                                |                               |              |                      |                  |             |                     |                           |
| 5W   | 5                                |                               |              |                      |                  |             |                     |                           |
| 10W  | 10                               |                               |              |                      |                  |             |                     |                           |
| 20W  | 20                               |                               |              |                      |                  |             |                     |                           |
| 50W  | 50                               |                               |              |                      |                  |             |                     |                           |
| R05K   |                                  | 50                            |              |                      |                  |             |                     |                           |
| R1K  |                                  | 100                           |              |                      |                  |             |                     |                           |
| R2K  |                                  | 200                           |              |                      |                  |             |                     |                           |
| R5K  |                                  | 500                           |              |                      |                  |             |                     |                           |
| 1K   |                                  | 1000                          |              |                      |                  |             |                     |                           |
| 2K<br>10K  |                                  | 2000                          |              |                      |                  |             |                     |                           |
| 20K  |                                  | 10000<br>20000                |              |                      |                  |             |                     |                           |
|  |                                  | 20000                         |              |                      |                  |             |                     |                           |
| DISPLAY TYPE   | Danisha                          | 7 t D                         |              |                      |                  |             |                     |                           |
| P  | Positive                         | Zero to + Ra                  | nge          |                      |                  |             |                     |                           |
| N<br>C   | Negative<br>Compound (4-12-20)   | Zero to - Ran<br>- Range to + | ige<br>Banga |                      |                  |             |                     |                           |
|  | Compound (4-12-20)               | - hallye to +                 | naliye       |                      |                  |             |                     |                           |
| ANALOG OUTPUT  |                                  |                               |              |                      |                  |             |                     |                           |
| 00   | None                             |                               |              |                      |                  |             |                     |                           |
| 10   | 0-10 Volts                       |                               |              |                      |                  |             |                     |                           |
| 42   | 4-20 mA                          |                               |              |                      |                  |             | J                   |                           |
| ACCESSORIES  |                                  |                               |              |                      |                  |             |                     |                           |
| P  | Panel Adapter                    |                               |              |                      |                  |             |                     |                           |
| C  | Waterproof Cover                 |                               |              |                      |                  |             |                     |                           |
| M  | Wall Mount for Easy Cal™         | only only                     |              |                      |                  |             |                     |                           |
| OPTION CODES   |                                  |                               |              |                      |                  |             |                     | -                         |
| M01  | Non-Latching Alarm               |                               |              |                      |                  |             |                     |                           |
| M10  | Easy Cal™ - Offered in 4-        | 20mA only                     |              |                      |                  |             |                     |                           |

M10 Easy Cal™ - Offered in 4-20mA only

#### 3 Year Warranty





#### UNITED ELECTRIC CONTROLS

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#### LPS SERIES WITH EASY CALTM

### Save time and money with EASY CAL™ in-place calibration and certification to 21 CFR II.

The front panel pressure input allows for calibration and certification without removal. High and Low limit alarms are independently set from front panel. LED display indicates the sensed pressure. When preset limit is exceeded, the LED signals an alarm condition by turning red. The adjustable "stand alone" time delay prevents intermittent tripping due to brief transient upsets.

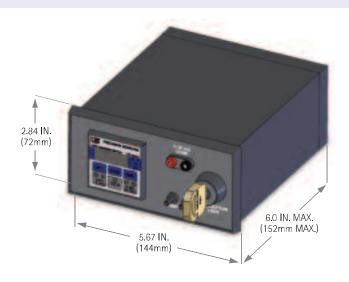
#### **SPECIFICATIONS**

Span: Front panel adjustment to  $\pm 10\%$  F.S. Enclosure: 4" x 6" panel mounted, or 3" x 5" x 6

4" x 6" panel mounted, or 3" x 5" x 6" surface panel mount

#### RANGE AND DISPLAY RESOLUTION

| Range    | Resolution    | Range   | Resolution  |
|----------|---------------|---------|-------------|
| 0.2" WC  | 0.200 x 0.001 | 50 Pa   | 50.0 x 0.1  |
| 0.5" WC  | 0.500 x 0.001 | 100 Pa  | 100 x 1     |
| 1.0" WC  | 1.00 x 0.01   | 200 Pa  | 200 x 1     |
| 2.0" WC  | 2.00 x 0.01   | 500 Pa  | 500 x 1     |
| 5.0" WC  | 5.00 x 0.01   | 1000 Pa | 1000 x 1    |
| 10.0" WC | 10.0 x 0.1    | 2 KPa   | 2.00 x 0.01 |
| 20.0" WC | 20.0 x 0.1    | 10 KPa  | 10.0 x 0.1  |
| 50" WC   | 50.0 x 0.1    | 20 KPa  | 20.0 x 0.1  |



#### **FEATURES**



- EASY CAL<sup>™</sup> for front panel calibration/certification
- Available ranges from 0.2" WC to 50" WC (50 Pascal to 20KPa)
- Measures both positive and negative pressure
- Bright LED display of process and alarm state
- 4-20 mA analog output standard
- High and low limit monitor
- Selectable time-delay eliminates nuisance alarm
- Analog circuit design eliminates potential microprocessor software problems
- Compact DIN enclosure
- Compliant with UL508 and CE EN 61326 EMI

### Mykron

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