## LOW PRESSURE TRANSMITTERS LP3 Series



# Precision low pressure control/sensing

#### **FEATURES:**

- Jumper selectable 2 wire current and 3 wire voltage outputs
- 24 Vac/dc power supply
- Six variable jumper selectable pressure ranges, W.C. & Pa.
- Available options include LCD display and integrated static probe



Peace of mind through reliable pressure monitoring

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

### **APPLICATIONS:**

- HVAC/VAV
- Process Control
- Air Flow Monitoring
- Drop Across Air Filters
- Hydraulic Pressures
- Pneumatic Pressures

#### **SPECIFICATION:**

Accuracy:
Measurement Type:
Response Time:
Stability:
Thermal Effects:
Compensated Range:
Proof Pressure:
Burst Pressure:
Operating Conditions:
Media Compatibility:
Power Supply:
Supply Current:
Input Voltage Effect:
Protection Circuitry:
Output Signal:
Output Drive Capabilities:
Zero Adjustments:
Wiring Connections:
Pressure Connection:
Conduit Connection:
Optional Display:
Enclosures:
Weight:

±1% F.S.O.

Differential (two port)

250 ms

< ±1% F.S.O. per year

< ±3% over compensated range

0 - 50° C (32 - 122°F)

40" W.C. (100" for 12" and 20" models) 60" W.C. (200" for 12" and 20" models)

0 - 70°C (32 - 158°F), 10 - 90 %RH, non-condensing

Non-corrosive, non-ionic fluids such as clean dry air or inert gases

20 - 28 Vac/dc (non-isolated half-wave rectified)

< 4 mA

Negligible over specified operating range Reverse voltage protected and out limited

4-20 mA (2-wire), 0-5 or 0-10 Vdc (3-wire), switch selectable

Current: 400 ohms max @ 24 vdc

Voltage: 10K ohms min Pushbutton auto-zero

Screw terminal block (14 to 22 AWG)

Barbed ports for 5 mm (0.170") ID flexible tubing Access hole for ½" NPT conduit or cable gland

3½ digit LCD, 0.4" digit height ABS, UL94-5VB, IP61 (NEMA 2)

127mm x 84mm x 53mm (5.00"W x 3.3" H x 2.1"D)

159 grams (5.6 oz)

#### **ACCESSORIES:**



FPP & SPP Series
Pitot Tube

The FPP and SPP series are used to sense velocity pressure or static pressure respectively. Constructed of 304 stainless steel probes with an ABS mounting bracket, they available in 150 mm (6") or 300 mm (12") lengths. Kits are available for differential and static that are complete with pneumatic tubing.



## DPFS Series Differential Pressure Probe

The DPFS series Averaging Flow Sensor is ideal for sensing differential pressure in the inlet section of variable air volume terminal units and fan terminal units. Units can also be used to sense differential pressure at other locations in the main or branch duct systems. They are made of ABS/polycarbonate (UL94-5V) and available in lengths from 100 mm (4") to 560 mm (22")



## MP Series Differential Pressure Probes

The MP series Air Velocity Pitot Tubes are used in conjunction with a DP transmitter to calculate airflow in larger ducts or in areas of turbulent airflow. The units come in pairs in either ABS or 316 S/S and are available in various lengths from 610mm (24") to 2000 mm (80"). Gasketed mounting collars for both probes are included.









#### **DESCRIPTION:**

The LP3 Low Pressure Transmitter can be used to measure positive, negative or differential pressure in the ranges of 1"W.C. to 20"W.C. (250 TO 2000Pa). The piezoresistive sensor is ideal for monitoring the pressure for air or other clean inert gas and is limited only to those media which will not attack polyetherimide, silicon, fluorosilicone, silicone, EPDM and neoprene seals.

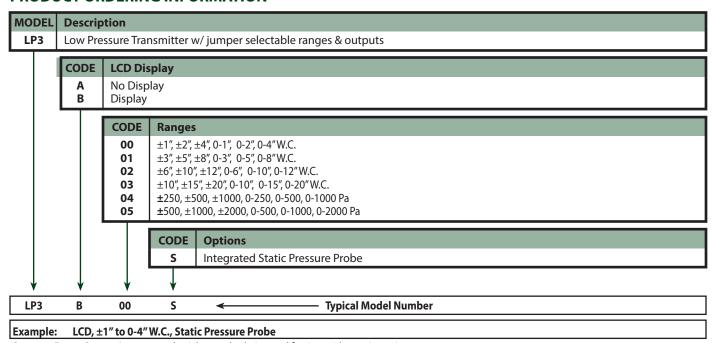
The LP3 features field selectable pressure ranges and output signal types for the most flexible applications. Typical HVAC applications include monitoring of filter differential pressure or VAV applications. The output signal is factory calibrated and temperature compensated for highest startup accuracy and trouble-free operation. Available options include LCDs and integrated static pressure probe.

Please read the installation instructions carefully before installing and commissioning the pressure transducer. Failure to follow the instructions may result in product damage. A qualified technician must install this device.

The LP3 Pressure Transducer mounts on any surface using the two holes provided on the base of the unit. Make sure there is enough space around the unit to connect the pressure tubing without kinking and avoid locations where severe vibrations or excessive moisture are present. Mount the enclosure with two user-supplied screws but do not over-tighten.

The unit may be mounted in any position but typically is installed on a vertical surface with the pressure ports on the right and the cable entrance on the left. The enclosure has a standard opening for a 1/2" conduit and may be installed with either conduit and a conduit coupler or a cable gland type fitting. Do not use in an explosive or hazardous environment, with combustible or flammable gasses, as safety or emergency stop devices or in any other application where failure of the product could result in personal injury. Take electrostatic discharge precautions during installation and do not exceed the device ratings.

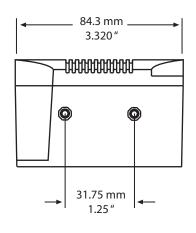
#### PRODUCT ORDERING INFORMATION

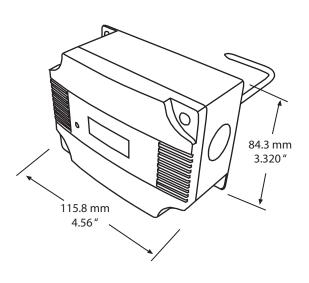


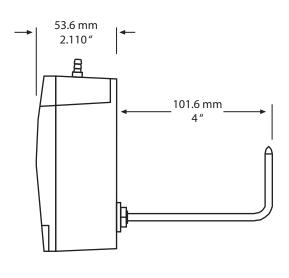
Greystone Energy Systems Inc. reserves the right to make design modifications without prior notice.

**Note:** 1"W.C. = 249.0Pa @ 40 F 1 bar = 10<sup>5</sup> Pa











## GREYSTONE

ENERGY SYSTEMS INC

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Quality Management System which is ISO 9001 certified,

assuring our customers of consistent product reliability.





Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leadingedge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our