GREYSTONE

ACCURACY BY DESIGN

LOW PRESSURE TRANSDUCERS
LP2 Series

Shown above c/w LCD and integrated static probe options.

Precision low pressure control/sensing

FEATURES:

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

Peace of mind through reliable pressure transducers

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM

APPLICATIONS:

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

SPECIFICATIONS: LP2 Series

Pressure Ranges	See ordering information
Calibration Accuracy	± 1% F.S.O.
Measurement Types	Differential (two ports), Static, Velocity and Total Pressure
Response Time	1 ms maximum
Stability	<±1% F.S.O. per year
Thermal Effects	<±3% over compensated range
Compensated Range	10 - 50˚C (50 - 122˚F)
Over Pressure	20 psi or 2 x range (whichever is greater)
Operating Conditions	0 - 60˚C (32 - 140˚F), 10 - 90% RH non-condensing
Media Compatibility	Limited only to those that will not attack polyetherimide, silicon, fluorosilicone, silicone, EPDM, and neoprene seals. Typically dry air or inert gas but liquid is allowed.
Power Supply (at transducer)	12 - 28 Vac, 15 - 35 Vdc (non-isolated half-wave rectified)
Supply Current	<4 mA
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Output Signal	4 - 20 mA (2-wire), 0 - 5 Vdc or 0 - 10 Vdc (3-wire)
Current Output Drive Capability	400 ohms maximum @ 24 Vdc
Voltage Output Drive Capability	2 Kohms minimum for 0-5 Vdc signal 10 Kohms minimum for 0-10 Vdc signal
Zero Adjustment	Pushbutton auto-zero
Wiring Connections	Screw terminal block (14 to 22 AWG)
Pressure Connections	Barbed ports for 4.3 mm (0.170") ID flexible tubing
Conduit Connections	Access hole for 1/2" NPT conduit or cable gland
Optional LCD	31/2 digit, 10 mm (0.4") digit height
Enclosure	High Impact Black ABS, plenum rated with optional gasket 116 mm W x 84 mm H x 53 mm D (4.55" x 3.3" x 2.1")

LP2 c/w LCD

LP2 c/w LCD
& integrated static probe

RoHS COMPLIANT

DESCRIPTION:

The LP2 Low Pressure Transducer can be used to measure positive, negative or differential pressure in the ranges of 1"W.C. to 12"W.C. (200 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 LP2 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 LP2 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

MODEL	Description
LP2	Jumper Selectable Low Pressure Transducer

CODE	Options
A	Standard
B	LCD Display

CODE	Pressure Ranges
00	±0.5", ±1", 0-1", 0-2" W.C.
01	±1.5", ±3", 0-3", 0-6" W.C.
02	±2", ±4", 0-4", 0-8" W.C.
03	±2.5", ±5", 0-5", 0-10" W.C.
04	±3", ±6", 0-6", 0-12" W.C.
05	±100, ±200, 200, 400 Pa
06	±250, ±500, 500, 1000 Pa
07	±400, ±800, 800, 1600 Pa
08	±500, ±1000, 1000, 2000 Pa

CODE	Options
S	Integrated Static Pressure Probe

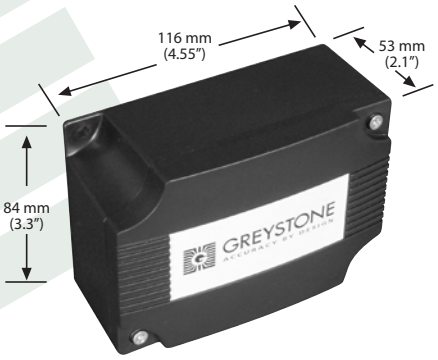
LP2	B	00	S	← Typical Model Number

Example: LCD, ±0.5" to 0-2" W.C., Static Pressure Probe

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

Note: 1"W.C. = 249.0Pa @ 40 F
1 bar = 10^5 Pa

DIMENSIONS:



ABS enclosure dimensions

OPTIONS:

Pitot Tube
HFO & HSO Series

The HFO and HSO series are used to sense velocity pressure or static pressure respectively. Available in 152 mm (6") length. Kits are available for differential and static that are complete with pneumatic tubing.

Differential Pressure Probe
SSS Series

The SSS series DP probe is used for sensing velocity pressure in the duct. Available in 102 mm, 152 mm, 203 mm & 254 mm (4", 6", 8" & 10") lengths. Kits are available that come complete with pneumatic tubing.

Static Probe Option

The S option is a high accuracy static tube. It is available as an option on the LP2 Series low pressure transducer.

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RoHS COMPLIANT

Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transducers for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

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