# Compact Low Pressure Sensor



# Accessory for HVAC/R

Measuring building pressure and air velocities or volumes doesn't get any easier than with the Automated Logic Compact Low Pressure Sensor. The mounting system allows for 2.75" snaptrack, DIN rail, or surface mounting, and the three outputs and 10 pressure ranges are field selectable by simply turning the rotary switch and pressing the "Next" button. The auto-zeroing process is also very easy — simply turn the rotary switch to zero, push the button for five seconds, turn the rotary switch back to your pressure range and walk away.



Besides being easy to set up and install, it is also accurate, rugged, and economical. The heart of the unit is a micro-machined silicon pressure sensor with excellent accuracy, repeatability, and stability. The unit has been optimized for pressures below 1" W.C. or 250 Pascals.

The unit features a rugged NEMA 1 rated enclosure with short circuit proof outputs and reverse polarity protected inputs to perform under real world conditions. The LCD display helps with troubleshooting because it displays the actual differential pressure over the entire operational range (-1 to +1 inches W.C. or -250 to +250 Pascals) regardless of which individual pressure range is selected for output to the system controller.

# **Key Features**

- Optimized for pressures below 1" W.C. or 250 Pascals
- 10 field-selectable pressure ranges and 3 field-selectable outputs
- LCD displays pressure over the entire operational range regardless of which individual pressure range is selected
- Inches of water column (W.C.) or pascal operation
- Free NIST certificate included with each Automated Logic Compact Low Pressure Sensor
- Simple auto-zero and one-touch setup
- Snaptrack, DIN rail, or surface mounting

# **Part Number**

# Description

NSB-ZPS-LR-EZ-ST-IN-A NSB-ZPS-LR-EZ-ST-PA-A Compact Low Pressure Sensor, Inches of W.C. Display with Static Pressure Probe Compact Low Pressure Sensor, Pascal Display with Static Pressure Probe



The WebCTRL® building automation system gives you the ability to understand your building operations and analyze the results. The WebCTRL system integrates environmental, energy, security and safety systems into one powerful management tool that allows you to lower energy consumption, increase occupant comfort, and achieve sustainable building operations. Our web-based platform allows building managers to control and access information about their HVAC, lighting, central plant and critical processes on premises or remotely at any time of day.



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# **Specifications**

#### Power:

7 to 40 VDC (4 to 20 mA Output)

7 to 40 VDC or 18 to 28 VAC (0 to 5 VDC Output)

13 to 40 VDC or 18 to 28 VAC (0 to 10 VDC Output)

Power Consumption:

20 mA max, DC only at 4 to 20 mA Output

4.9 mA max DC at 0 to 5 VDC or 0 to 10 VDC Output

0.12 VA max AC at 0 to 5 VDC or 0 to 10 VDC Output

Load Resistance:

4 to 20 mA Output 850 Ω Maximum @ 24 VDC

0 to 5 VDC or 0 to 10 VDC output 1K $\Omega$  minimum

Accuracy at 72°F:

 $\pm 0.5\%$  of range 0 to 0.1", 0 to 0.25",  $\pm 0.1$ " and  $\pm 0.25$ " ranges

 $\pm 0.5\%$  of range 0 to 30 Pa, 0 to 50 Pa,  $\pm 30$  Pa and  $\pm 50$  Pa ranges

±0.25% of range all other ranges

Stability: ±0.25% F.S. per year

Environmental Operation Range:

-14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40 to 203°F (-40 to 95°C)

## Temperature Error:

0.04% FS/°F (0.07% FS/°C) (±1.0" W.C. @ -4 to 140°F [-20 to 60°C])

Overpressure: Proof: 27.68" W.C. (1 PSI),

Burst: 41.52" W.C. (1.5 PSI)

#### Wiring:

3-wire removable terminal block (14 to 24 AWG)\*

2 wires (4 to 20mA Current loop)\*

3 wires (AC or DC powered, Voltage out)\*

Humidity: 0 to 95% RH, non-condensing

#### Port Connection:

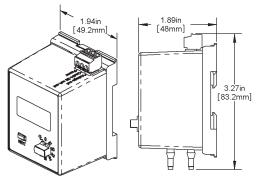
1 High Pressure & 1 Low Pressure for push-on 1/4-inch tubing (1/8" to 3/16" I.D.)

Enclosure Material: ABS Plastic, UL94, V-0

### Mounting:

### DIN Rail, Snaptrack or Surface Mountable

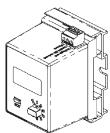
<sup>\*</sup> It is recommended that you do not run wiring for the pressure transmitter in the same conduit as line voltage wiring or with wiring used to supply highly inductive loads such as motors, generators and coils.

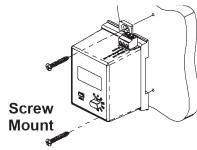


# **Mounting Options**



Snaptrack Mount





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