



Features & Options

- 10 Field Selectable Pressure Ranges & 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 Pressure Unit
- Simple Auto-Zero and One Touch Setup
- Snaptrack, DIN Rail or Surface Mounting
- Optimized for Pressures Below 1" W.C. or 250 Pascals
- Three Year Warranty



EZ Pressure Sensor

Measuring building pressure and air velocities or volumes doesn't get any easier than with the BAPI EZ Low Pressure Sensor. The revolutionary 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, wait 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 specifically developed for low pressure. The sensor design inherently provides 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.

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 Ω minimum

Accuracy at 72°F:

$\pm 0.5\%$ of range 0 to 0.1", 0 to 0.25", ± 0.1 " and ± 0.25 " ranges
 $\pm 0.5\%$ of range 0 to 30 Pa, 0 to 50 Pa, ± 30 Pa and ± 50 Pa ranges
 $\pm 0.25\%$ of range all other ranges

Stability: $\pm 0.25\%$ F.S. per year

Temperature Error:

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

Environmental Operation Range: -4 to 140°F (-20 to 60°C)

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

Overpressure: Proof: 27.68 in W.C. (1 PSI),
Burst: 41.52 in 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

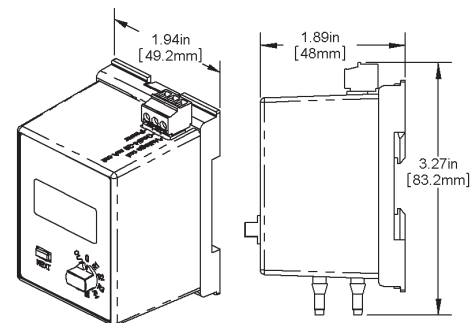
Port Connection:

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

Enclosure Material: ABS Plastic, UL94, V-0

Mounting:

DIN Rail, Snaptrack or Surface Mountable



*BAPI recommends 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.

Note: Mount unit with the pressure fittings on the bottom to prevent condensation from entering the sensor.



Ordering Information (for units without a factory specified range or output)

PART NUMBER	DESCRIPTION
ZPS-LR-EZ-NT-IN	EZ Low Pressure Sensor, Inches of W.C. Display, No Tube or Probe included
ZPS-LR-EZ-NT-PA	EZ Low Pressure Sensor, Pascal Display, No Tube or Probe included
ZPS-LR-EZ-ST-IN	EZ Low Pressure Sensor, Inches of W.C. Display with Static Pressure Probe
ZPS-LR-EZ-ST-PA	EZ Low Pressure Sensor, Pascal Display with Static Pressure Probe

Note: Pressure Range and Output Range for these units will be selected in the field.

Part numbers for units with a factory specified range or output

Ordering Information		EZ Low Zone Pressure Sensor with Display			
ZPS					
	Output Range				
	-20	4 to 20 mA	(7 to 40 VDC Supply ONLY)		
	-05	0 to 5 V	(7 to 40 VDC Supply or 18 to 28 VAC Supply)		
	-10	0 to 10 V	(13 to 40 VDC Supply or 18 to 28 VAC Supply)		
		Pressure Range			
		-LR(range)	Standard Pressure Ranges - replace (range) with option # shown below		
			<u>Option</u>	<u>Range (inches W.C.)</u>	<u>Option</u> <u>Range (Pascals)</u>
			51	0 to 0.10	61 0 to 30
			52	0 to 0.25	62 0 to 50
			53	0 to 0.50	63 0 to 100
			54	0 to 0.75	64 0 to 175
			55	0 to 1.00	65 0 to 250
			56	-0.10 to 0.10	66 -30 to 30
			57	-0.25 to 0.25	67 -50 to 50
			58	-0.50 to 0.50	68 -100 to 100
			59	-0.75 to 0.75	69 -175 to 175
			60	-1.00 to 1.00	70 -250 to 250
			<u>Custom Range (W.C.)***</u>		<u>Custom Range (Pascals)***</u>
			CI	[0 to y.yy]*	CP [0 to yyyy]**
		Enclosure Style			
		-EZ	NEMA 1 rated enclosure		
			Optional Static Pressure Probe		
			-NT	No Tube or Probe Included	
			-ST	Static Pressure Measurement Probe Included (not attached)	
				LCD Display (See note **** below)	
			-D	LCD Display****	
EXAMPLE					
ZPS	-20	-LR51	-EZ	-NT	-D
Example Part Number: ZPS-20-LR51-EZ-NT-D					
Your Part Number:					

*Custom W.C. ranges must start at zero and y.yy can be any pressure between 0.05 and 1.00 inches W.C. Placing the unit into +/- places the custom range in bi-directional mode (Example Part # ZPS-20-SRCI[0.10 to 0.50]-EZ-NT-D)

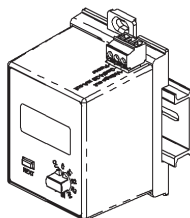
**Custom Pascal ranges must start at zero and yyyy can be any pressure between 15 and 250 Pascals. Placing the unit into +/- places the custom range in bi-directional mode (Example Part #: ZPS-20-SRCP[20 to 200]-EZ-NT-D)

***There is a net add of \$30 for custom ranges. Multipliers do not apply to net adds. Custom Ranges include a certification of 3 points within the custom pressure range.

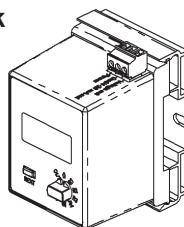
****If you do not wish to view the current pressure on the display, simply leave off the "-D" in the part number. Instead of showing the current pressure, the display will show the word "on".

Mounting Options

DIN Rail Mount



Snaptrack Mount



Screw Mount

