EZ Pressure Sensor (

Zone Pressure Sensors (ZPS)

Rev. 04/10/10

Features & Options

- 10 Field Selectable Pressure Ranges
- 3 Field Selectable Outputs, 4-20 mA, 0-5 or 0-10 VDC
- 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
- Simple Auto-Zero and One Touch Set Up
- Snaptrack, DIN Rail or Surface Mounting
- Three Year Warranty



EZ Pressure Sensor

Measuring building pressure and air velocities or volumes doesn't get any easier than with the BAPI EZ 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 capacitive pressure sensor specifically developed for low pressure. The capacitive sensor design inherently provides excellent accuracy, repeatability and stability – even at low pressures.

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.

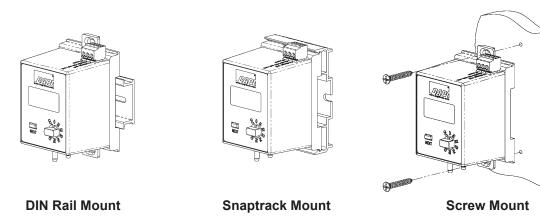
The LCD display helps with troubleshooting because it displays the actual differential pressure over the entire operational range (-5 to +5 inches W.C. or -1,000 to 1,000 Pascals) regardless of which individual pressure range is selected for output to the system controller.

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

Part Number	<u>Description</u>
ZPS-EZ-NT-IN	EZ Pressure Sensor, Inches of W.C. Display, No Tube or Probe included
ZPS-EZ-NT-PA	EZ Pressure Sensor, Pascal Display, No Tube or Probe included
ZPS-EZ-ST-IN	EZ Pressure Sensor, Inches of W.C. Display with Static Pressure Probe
ZPS-EZ-ST-PA	EZ Pressure Sensor, Pascal Display with Static Pressure Probe

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

Mounting Options





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Specifications

Power:

7 to 45 VDC (4-20 mA output) 7 to 45 VDC or 7 to 32 VAC (0-5 VDC output) 13 to 45 VDC or 13 to 32 VAC (0-10 VDC output)

Power Consumption:

4.9 mA max DC at 0-5 VDC or 0-10 VDC Output 0.12 VA max AC at 0-5 VDC or 0-10 VDC Output 20 mA max, DC only at 4-20 mA Output

Load Resistance:

0-5 VDC or 0-10 VDC Output - 1 k Ω minimum 4-20 mA Output - 850 Ω max @ 24 VDC

Accuracy: ±1% on 0 to 0.1 range and ±0.1 range,

±0.5% on all other ranges

Stability: ±2% F.S. (full scale) per year

Temperature Error: ±2% of Span max (0 to 60°C)

Overpressure: Proof - 1 PSI, Burst - 1.5 PSI

Mounting:

35mm DIN Rail, 2.75" Snaptrack or Surface

Wiring: 2 wires (4-20 mA Current Loop) 3 wires (AC or DC Powered, Voltage Out)

Environmental Operation Range:

Temperature:

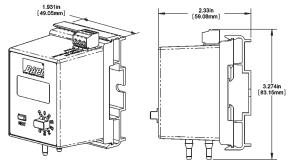
-13 to 176°F (-25 to 80°C)

32 to 140°F (0 to 60°C) compensated range

Humidity:

0 to 95% RH, non-condensing

Display: 4 digit LCD, 1/2" tall



3									
		ut Range 4 to 20 mA (7 to 45 VDC Supply ONLY)							
-		0 to 5 V		(7 to 45 VDC Supply ONLY)					
-			(7 to 45 VDC Supply or 7 to 32 VAC Supply)						
-	-10	0 to 10 V (13 to 45 VDC Supply or 13 to 32 VAC Supply)							
		Pressure Range -SR(range) Standard Pressure Ranges - replace (range) with option # shown below							
		(0 /		Range (inches W.C.		Option	Range (Pascals)		
			01	0 to 0.10	_	11	0 to 25		
			02	0 to 0.25		12	0 to 50		
			03	0 to 1.00		13	0 to 300		
			04	0 to 2.50		14	0 to 500		
			05	0 to 5.00		15	0 to 1,000		
			06	-0.10 to 0.10		16	-25 to 25		
			07	-0.25 to 0.25		17	-50 to 50		
			08 09	-1.00 to 1.00 -2.50 to 2.50		18 19	-300 to 300 -500 to 500		
			10	-2.50 to 2.50 -5.00 to 5.00		20	-1,000 to 1,000		
							· · · · · · · · · · · · · · · · · · ·		
			CI	Custom Range (W.C.) [0 to y.yy]*		CP	stom Range (Pascals)*** [0 to yyyy]**		
			Enclosure	Style			. ,,,,,		
			-EZ	NEMA 1 rated enclos	ure				
				Optional Static Pres	sure Pro	be			
				-NT	No Tube	or Probe Included			
				-ST	Static Pr	ressure Measuremei	nt Probe Included (not attached)		
					LCD Dis	splay (See note **	** below)		
					-D	LCD Display****			
M	PLE								
6	-20	-SR01	-EZ	-NT	-D				
nr	le Part	Number: ZPS-2	0-SR01-EZ	-NT-D					

^{*}Custom W.C. ranges must start at zero and y.yy can be any pressure between .10 and 5.00 inches W.C. Placing the unit into +/places the custom range in bi-directional mode (Example Part # ZPS-20-SRCI[0.00 to 3.00]-EZ-NT-D)

^{**}Custom W.C. ranges must start at zero and yyyy can be any pressure between 25 and 1250 Pascals. Placing the unit into +/-places the custom range in bi-directional mode (Example Part #: ZPS-20-SRCP[0 to 100]-EZ-NT-D)

^{***}There is a net add of \$100 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".