Pressure Multi-Sensor, Standard, Low & High Ranges

Zone Pressure Multi-Sensors (ZPM)

Rev. 04/07/17



Features & Options

10 Field Selectable Pressure Ranges and 5 Field Selectable Outputs

Optional Display Shows Pressure Over the Entire Operational Range Regardless of Which Pressure Range is Selected

- Standard, Low and High Range Units
- Ranges and Outputs Can Be Set Without Power
- Free NIST Certificate Included with Each Unit

BAPI's Zone Pressure Multi-Sensor is the most flexible pressure sensor on the market. Output,

range, units, directionality, and response time are guickly set in the field with no tools, no power and no small components.

The optional LCD display helps with troubleshooting because it displays the actual differential pressure over the entire operational range regardless of which individual pressure range is selected for output to the system controller. Three LEDs on the face of the unit indicate when the pressure is "Out of Range Low", "In Range" or "Out of Range High".



ZPM Pressure Multi-Sensor

Specifications

Power:

7 to 40 VDC (4 to 20 mA Output) 7 to 40 VDC or 18 to 32 VAC (0 to 5 or 1 to 5 V Output) 13 to 40 VDC or 18 to 32 VAC (0 to 10 or 2 to 10 V 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 V or 0 to 10 V output 6K to $10K\Omega$ minimum

Accuracy for Standard Pressure Ranges at 72°F: ±0.25% of range

Accuracy for Low Pressure Ranges at 72°F:

±0.5% of range for the three lowest unidirectional and bidirectional ranges, ±0.25% of range all other ranges

Accuracy for High Pressure Ranges at 72°F:

±0.25% on all ranges

Stability: ±0.25% F.S. per year

Environmental Op. Range: -4 to 140°F (-20 to 60°C) Storage Temperature: -40 to 203°F (-40 to 95°C)

Temperature Error Low Range:

0.04% FS/°F (0.07% FS/°C)

(±1.0" W.C @-4 to 140°F (-20 to 60°C)

Temperature Error Standard Range:

0.01% FS/°F (0.02% FS/°C)

(±5.0" W.C @-4 to 140°F (-20 to 60°C)

Temperature Error High Range:

0.015% FS/°F (0.025% FS/°C) (0 to 30" W.C @-4 to 140°F (-20 to 60°C)

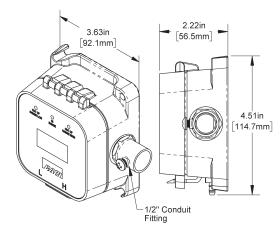
Overpressure:

Proof: 300.1 WC (10.83 PSI) Burst: 512.6 WC (18.5 PSI)

2 wires (4 to 20mA Current loop)*

3 wires (AC or DC powered, Voltage out)* Humidity: 0 to 95% RH, non-condensing **Port Size:** 1/4" tubing (1/8" to 3/16" I.D.) Encl. Material: UV-resistant Polycarb., UL94, V-0

Enclosure Rating: IP44, NEMA 2



*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.





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Ordering Information

STANDARD RANGE UNITS

PART NUMBER	DESCRIPTION
BA/ZPM-SR-NT-D	ZPM Standard Range Unit, No Tube or Probe included, with Display
BA/ZPM-SR-ST-D	ZPM Standard Range Unit, with Static Pressure Tube, with Display
BA/ZPM-SR-AT-D	ZPM Standard Range Unit, with Attached Static Tube, with Display
	ZPM Standard Range Unit, No Tube or Probe included, No Display
BA/ZPM-SR-ST-ND	ZPM Standard Range Unit, with Static Pressure Tube, No Display
BA/ZPM-SR-AT-ND	ZPM Standard Range Unit, with Attached Static Tube, No Display

LOW RANGE UNITS

BA/ZPM-LR-NT-D ZPM Low Range Unit, No Tube or Probe included, with Display BA/ZPM-LR-ST-D ZPM Low Range Unit, with Static Pressure Tube, with Display BA/ZPM-LR-AT-D ZPM Low Range Unit, with Attached Static Tube, with Display
BA/ZPM-LR-NT-ND ZPM Low Range Unit, No Tube or Probe included, No Display BA/ZPM-LR-ST-ND ZPM Low Range Unit, with Static Pressure Tube, No Display BA/ZPM-LR-AT-ND ZPM Low Range Unit, with Attached Static Tube, No Display

HIGH RANGE UNITS

BA/ZPM-HR-NT-D ZPM High Range Unit, No Tube or Probe included, with Display
BA/ZPM-HR-ST-D ZPM High Range Unit, with Static Pressure Tube, with Display
BA/ZPM-HR-AT-D ZPM High Range Unit, with Attached Static Tube, with Display
BA/ZPM-HR-NT-ND ZPM High Range Unit, No Tube or Probe included, No Display
BA/ZPM-HR-ST-ND ZPM High Range Unit, with Static Pressure Tube, No Display
BA/ZPM-HR-AT-ND ZPM High Range Unit, with Attached Static Tube, No Display

Pressure Range, Output Range and Inches of Water Column or Pascal Operation will be selected in the field for these units. Ranges and Outputs shown below:

Custom Ranges are also available. Contact your BAPI representative for ordering information.

Your Number: BA/ZPM-

Field Selectable Ranges and Outputs

STANDARD RANGE UNITS		
Inches WC	<u>Pascals</u>	
0 to 1.00	0 to 250	
0 to 2.00	0 to 300	
0 to 2.50	0 to 500	
0 to 3.00	0 to 1,000	
0 to 5.00		
-1.00 to 1.00	250 to 250	
-2.00 to 2.00	300 to 300	
-2.50 to 2.50	500 to 500	
-3.00 to 3.001	,000 to 1,000	
-5.00 to 5.001	,250 to 1,250	

Inches WC	<u>Pascals</u>	
0 to 0.10	0 to 30	
0 to 0.25	0 to 50	
0 to 0.50	0 to 100	
0 to 0.75	0 to 175	
0 to 1.00	0 to 250	
-0.10 to 0.10	30 to 30	
-0.25 to 0.25	50 to 50	
-0.50 to 0.50	-100 to 100	
-0.75 to 0.75	-175 to 175	
-1.00 to 1.00	-250 to 250	

LOW RANGE UNITS

HIGH RANGE UNITS		
Inches WC	<u>Pascals</u>	
0 to 5	0 to 1,250	
0 to 10	0 to 2,500	
0 to 15	0 to 4,000	
0 to 25	0 to 6,000	
0 to 30	0 to 7,400	

OUTPUTS AVAILABLE

4 to 20 mA 0 to 5 V 0 to 10 V 2 to 10 V 1 to 5 V

