

Features & Options

- Field Selectable Pressure Ranges and Output
- Optional Display Shows 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 Process
- IP66 rated BAPI-Box Enclosure
- Three Year Warranty

BAPI's Zone Pressure Sensor with Display is an accurate, rugged and economical solution for measuring and reporting duct/building static pressure, room-to-room differential pressure or air velocities/volumes. The heart of the unit is a micro-machined silicon pressure sensor. The capacitive sensor design inherently provides excellent accuracy, repeatability and stability.

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.

Pressure Sensor with Attached Static Tube

The unit is available with an Attached Static Tube so it doesn't require two trades to install the unit. Choose the (-AT) option in the Static Pressure Probe section of the ordering grid at right.



Patent Pending



ZPS in the BAPI-Box, with and without Display



Specifications

Power:

7 to 45 VDC (4 to 20 mA Output)
7 to 45 VDC or 7 to 32 VAC (0 to 5 VDC Output)
13 to 45 VDC or 13 to 32 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: $\pm 0.25\%$ of range

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

Environmental Operation Range:

32°F to 140°F (0°C to 60°C)

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

Temperature Error:

$\pm 2\%$ of Span max
(± 5.0 in W.C. @ 50°F to 104°F [10 to 40°C])

Overpressure: Proof 27.68 in W.C. (1 PSI),
Burst 41.52 in W.C. (1.5 PSI)

Wiring: 2 wires (4-20mA 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" – 3/16" I.D.)

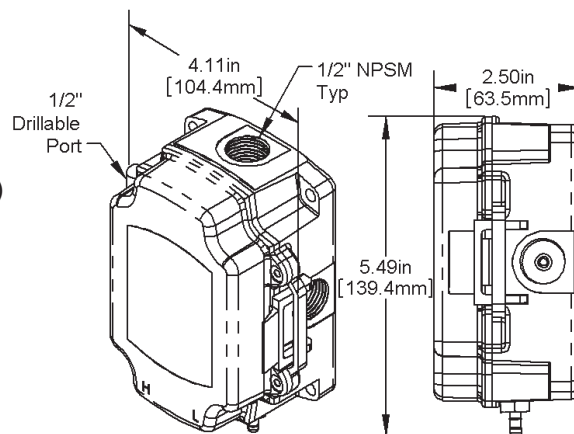
Enclosure Material:

UV-resistant Polycarbonate, UL94, V-0

Enclosure Rating: IP66, NEMA 4

Mounting:

Four external tabs with holes for #10 screws



¹BAPI 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.



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Datasheets without List Prices are available on our website at www.bapihvac.com

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

Part Number	Description	List Price
ZPS-SR-BB-NT-D-IN	.... BAPI-Box with Display, inches of W.C. ranges, No Tube/Probe included.....	\$340
ZPS-SR-BB-ST-D-IN	.... BAPI-Box with Display, inches of W.C. ranges with Static Pressure Probe.....	\$340
ZPS-SR-BB-AT-D-IN	.... BAPI-Box with Display, inches of W.C. ranges with Attached Static Tube.....	\$340
ZPS-SR-BB-NT-D-PA	.. BAPI-Box with Display, Pascal ranges, No Tube or Probe included.....	\$340
ZPS-SR-BB-ST-D-PA	... BAPI-Box with Display, Pascal ranges with Static Pressure Probe.....	\$340
ZPS-SR-BB-AT-D-PA	... BAPI-Box with Display, Pascal ranges with Attached Static Tube.....	\$340
ZPS-SR-BB-NT-IN	..... BAPI-Box without Display, inches of W.C. ranges, No Tube or Probe included....	\$340
ZPS-SR-BB-ST-IN	..... BAPI-Box without Display, inches of W.C. ranges with Static Pressure Probe.....	\$340
ZPS-SR-BB-AT-IN	..... BAPI-Box without Display, inches of W.C. ranges with Attached Static Tube.....	\$340
ZPS-SR-BB-NT-PA	..... BAPI-Box without Display, Pascal ranges, No Tube or Probe included.....	\$340
ZPS-SR-BB-ST-PA	..... BAPI-Box without Display, Pascal ranges with Static Pressure Probe.....	\$340
ZPS-SR-BB-AT-PA	..... BAPI-Box without Display, Pascal ranges with Attached Static Tube.....	\$340

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		Zone Pressure Sensor in a BAPI-Box, Standard Ranges	List Price	Your Order				
ZPS			\$340	\$_____				
Output Range								
-20	4 to 20 mA	(7 to 45 VDC Supply ONLY)						
-05	0 to 5 V	(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								
	Option	Range (inches W.C.)	Option	Range (Pascals)				
	71	0 to 1.00	81	0 to 250				
	72	0 to 2.00	82	0 to 300				
	73	0 to 2.50	83	0 to 500				
	74	0 to 3.00	84	0 to 1,000				
	75	0 to 5.00	85	0 to 1,250				
	76	-1.00 to 1.00	86	-250 to 250				
	77	-2.00 to 2.00	87	-300 to 300				
	78	-2.50 to 2.50	88	-500 to 500				
	79	-3.00 to 3.00	89	-1,000 to 1,000				
	80	-5.00 to 5.00	90	-1,250 to 1,250				
	Custom Range (W.C.) ***		Custom Range (Pascals) ***					
	CI	[x.xx to y.yy]*	CP	[xxxx to yyyy]**				
			\$100	Net Add***				
Enclosure Style (Must Select One)								
	-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate	\$0					
Static Pressure Probe (Must Select One)								
	-NT	No Tube or Probe Included	\$0					
	-ST	Static Pressure Measurement Probe Included (not attached)	\$0					
	-AT	Attached Static Pressure Probe (Not available with Back Mount [-BM])	\$0					
Optional LCD Display (Omit if not required)								
	-D	LCD Display	\$0					
Back Mounting Options (Omit if not required)								
	-BM	Back Mount (wires and pressure ports run out the back, not available with Attached Static Pressure Probe [-AT])	\$0					
EXAMPLE								
ZPS	-20	-SR71	-BB	-NT	-D	-BM	Total =	\$_____
Example Part Number: ZPS-20-SR71-BB-NT-D-BM								
Your Part Number:								

*For custom W.C. ranges, x.xx and y.yy can be any pressure from -5.00 to +5.00 inches W.C. However, x.xx must be less than y.yy and y.yy - x.xx must be at least .4 inches. (Example: ZPS-20-SRCP[0.00 to 3.50]-BB-NT-D-BM)

**For custom Pascal ranges, xxxx and yyyy can be any pressure between -1250 to +1250 Pascals. However, xxxx must be less than yyyy and yyyy - xxxx must be at least 100 Pascals. (Ex: ZPS-20-SRCP[0 to 100]-BB-NT-D-BM)

***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.