

Rev. 05/09/14

Features & Options

- Touch Interface Through the Cover, No More Dip Switches
- Field Selectable Output, Ranges and WC or Pascal Operation
- Free NIST Certificate with Each Pressure Unit
- 21 Field Selectable Pressure Ranges
- Adjustable Pressure Endpoints for Custom Pressure Ranges

BAPI's Zone Pressure Touch (ZPT) Sensor 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 with excellent accuracy, repeatability and stability.

The touch interface allows for quick and easy set up of all parameters including auto zero, pressure ranges, output ranges, W.C. or Pascal operation, and display format of pressure, percent output or “On”. You can also use the interface to create custom ranges.

The LCD helps with troubleshooting because it displays the actual differential pressure over the entire operational range (-5 to +5 inches W.C. or -1,250 to 1,250 Pascals) regardless of which individual pressure range is selected for output to the system controller.

Sensor with Attached Static Tube

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



Patent Pending



“Touch” Pressure
Sensor in the BAPI-Box

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 VDC Output)
13 to 40 VDC or 18 to 32 VAC (0 to 10 or 2 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:

-4 to 140°F (-20 to 60°C)

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

Temperature Error:

0.01% FS/°F (0.02% FS/°C) (± 5.0 " W.C. @ -4 to 140°F [-20 to 60°C])

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

Wiring: 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.)

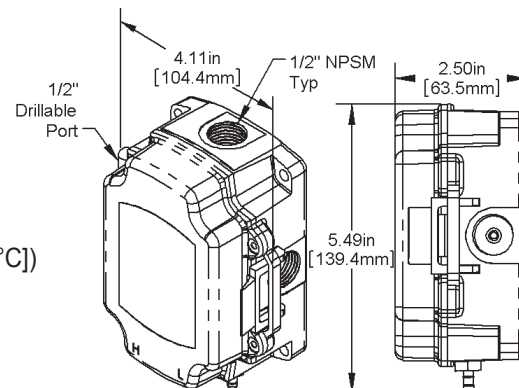
Enclosure Material:

UV-resistant Polycarbonate, UL94, V-0

Enclosure Rating: IP66, NEMA 4

Mounting:

Four external tabs with holes for #10 screws



*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.

“Touch” Pressure Standard Range 1” to 5” WC

**Zone Pressure
Touch (ZPT) Sensors**

D7

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

Part Number	Description
ALC/ZPT-SR-BB-NT-D..	Zone Pressure Touch sensor, Standard Ranges, No Tube/Probe included
ALC/ZPT-SR-BB-ST-D..	Zone Pressure Touch sensor, Standard Ranges, with Static Pressure Probe
ALC/ZPT-SR-BB-AT-D..	Zone Pressure Touch sensor, Standard Ranges, with Attached Static Tube

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 Touch sensor in a BAPI-Box, Standard Ranges				
ALC/ZPT	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 32 VAC Supply)			
	-10	0 to 10 V	(13 to 40 VDC Supply or 18 to 32 VAC Supply)			
	-12	2 to 10 V	(13 to 40 VDC Supply or 18 to 32 VAC Supply)			
	-15	1 to 5 V	(7 to 40 VDC Supply or 18 to 32 VAC Supply)			
	Pressure Range					
	-SR(range)	Standard Pressure Ranges - <i>replace (range) with option # shown below</i>				
		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		
	<u>Custom Range (W.C.) ***</u>		<u>Custom Range (Pascals) ***</u>			
	CI	[x.xx to y.yy]*	CP	[xxxx to yyyy]**		
Enclosure Style (Must Select One)						
	-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate				
Static Pressure Probe (Must Select One)						
	-NT	No Tube or Probe Included				
	-ST	Static Pressure Measurement Probe Included (not attached)				
	-AT	Attached Static Pressure Probe (Not available with Back Mount [-BM])				
LCD Display (Must Select, See note **** below)						
	-D	LCD Display				
Back Mounting Options (Omit if not required)						
	-BM	Back Mount (pressure ports run out the back, not available with Attached Static Pressure Probe [-AT])				
EXAMPLE						
ALC/ZPT	-20	-SR71	-BB	-NT	-D	-BM
Example Part Number: ALC/ZPT-20-SR71-BB-NT-D-BM						
Your Part Number:						

While field technicians can easily set up custom ranges in the field, BAPI will setup custom ranges in our factory. See the notes below for additional information and fees.

*For custom W.C. ranges, x.xx and y.yy can be any pressure from -5.00 to +5.00 inches W.C. However, y.yy - x.xx must be at least ±1 inch. (Example: ALC/ZPT-20-SRCI[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, yyyy - xxxx must be at least ±250 Pascals. (Ex: ALC/ZPT-20-SRCP[0 to 750]-BB-NT-D-BM)

***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".