



### Features & Options

- Touch Interface Through the Cover, No More Dip Switches
- Field Selectable Output, Pressure Ranges and WC or Pascal Units
- Free NIST Certificate Included with Each Pressure Unit
- Standard Range (-5 to +5 WC or -1,250 to +1,250 Pascals) or Low Range (-1.0 to +1.0 WC or -250 to +250 Pascals)
- Custom Pressure Ranges Can be Created in the Field



BAPI's Zone Pressure “Touch” (ZPT) sensor is an accurate, rugged and economical solution for measuring building pressure, air velocities and 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 pressure ranges, output ranges and WC or Pascal units. The interface can even be used to create custom ranges in the field.

The LCD 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.



Touch Pressure 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  $\Omega$  Maximum @ 24 VDC  
0 to 5 V or 0 to 10 V output 1K $\Omega$  minimum

#### Accuracy for Standard Pressure Ranges at 72°F:

$\pm 0.25\%$  of range

#### Accuracy for Low Pressure Ranges at 72°F:

$\pm 0.5\%$  of range for the three lowest unidirectional and bidirectional ranges

$\pm 0.25\%$  of range all other ranges

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

#### Environmental Operation Range:

14°F to 140°F (-10°C to 60°C)

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

#### Temperature Error for Standard Ranges:

0.01% FS/°F (0.02% FS/°C)  
( $\pm 5.0$ ” W.C. @ 14 to 140°F [-10 to 60°C])

#### Temperature Error for Low Ranges:

0.04% FS/°F (0.07% FS/°C)  
( $\pm 1.0$ ” W.C. @ 14 to 140°F [-10 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:

1/4” tubing (1/8” to 3/16” I.D.)

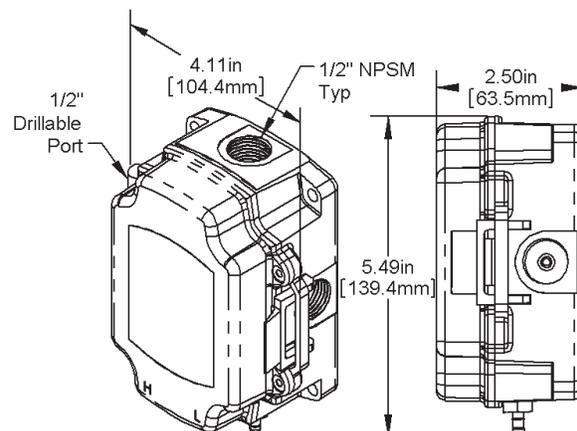
#### Enclosure Material:

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.





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

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ZPT-SR-BB-NT-D .....	Standard Range Unit, Display, No Tube or Probe included
ZPT-SR-BB-ST-D .....	Standard Range Unit, Display with Static Pressure Probe
ZPT-SR-BB-AT-D .....	Standard Range Unit, Display with Attached Static Probe
ZPT-LR-BB-NT-D .....	Low Range Unit, Inches WC, Display, No Tube or Probe included
ZPT-LR-BB-ST-D .....	Low Range Unit, Inches WC, Display with Static Pressure Probe
ZPT-LR-BB-AT-D .....	Low Range Unit, Inches WC, Display with Attached Static Probe

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

For units with a factory specified range or output, use Selection Guide below

### Standard and Low Range Touch Pressure Option Selection Guide

#### ZPT - ( #1 ) - ( #2 ) - ( #3 ) - ( #4 )

##### #1: Pressure Output (required)

20.....	4 to 20 mA
05.....	0 to 5 V
10.....	0 to 10 V
12.....	2 to 10 V
15.....	1 to 5 V

##### #2: Pressure Range (required)

###### LOW RANGES

###### WC Ranges

LR51..	0 to 0.10
LR52..	0 to 0.25
LR53..	0 to 0.50
LR54..	0 to 0.75
LR55..	0 to 1.00
LR56..	-0.10 to 0.10
LR57..	-0.25 to 0.25
LR58..	-0.50 to 0.50
LR59..	-0.75 to 0.75
LR60..	-1.00 to 1.00

###### Pascal Ranges

LR61 .....	0 to 30
LR62 .....	0 to 50
LR63 .....	0 to 100
LR64 .....	0 to 175
LR65 .....	0 to 250
LR66 .....	-30 to 30
LR67 .....	-50 to 50
LR68 .....	-100 to 100
LR69 .....	-175 to 175
LR70 .....	-250 to 250

##### #2: Pressure Range continued...

###### STANDARD RANGES

###### WC Ranges

SR71..	0 to 1.00
SR72..	0 to 2.00
SR73..	0 to 2.50
SR74..	0 to 3.00
SR75..	0 to 5.00
SR76..	-1.00 to 1.00
SR77..	-2.00 to 2.00
SR78..	-2.50 to 2.50
SR79..	-3.00 to 3.00
SR80..	-5.00 to 5.00

###### Pascal Ranges

SR81.....	0 to 250
SR82.....	0 to 300
SR83.....	0 to 500
SR84.....	0 to 1,000
SR85.....	0 to 1,250
SR86.....	-250 to 250
SR87.....	-300 to 300
SR88.....	-500 to 500
SR89..	-1,000 to 1,000
SR90..	-1,250 to 1,250

##### #3: Static Pressure Tube (required)

BB-NT..	No Tube included
BB-ST..	Static Pressure Tube included
BB-AT..	Attached Static Pressure Probe

##### #4: Display (optional)

D.....	LCD (See Note below)
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Factory set Custom Ranges are available for these units. Contact your BAPI representative for ordering.

Note: The display is always present. If you do not select the display option, the display will show the word "On" rather than the current pressure.

Example Number: ZPT - ( 05 ) - ( SR72 ) - ( BB-ST ) - ( D )

Actual Number (with parenthesis removed): ZPT-05-SR72-BB-ST-D

Description: 0-5 V Output, 0 to 2" WC Pressure Range, Touch Unit with Static Tube and Display.

Your Number: ZPT-

