



Features & Options

- 5 Field Selectable Pressure Ranges & 3 Field Selectable Outputs
- Optional LCD Shows Pressure Over the Entire Operational Range Regardless of Which Individual Pressure Range is Selected
- Inches of Water Column (W.C.) or Pascal Operation
- Free NIST Certificate Included with Each Pressure Unit
- Simple Auto-Zero Process
- Three Year Warranty

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

The LCD aids in troubleshooting by displaying the actual differential pressure over the entire operational range (0 to 30 W.C. or 0 to 7,400 Pascals) regardless of which individual pressure range is selected for output to the controller.

The unit comes in a rugged, IP66-rated enclosure with short circuit proof outputs and reverse polarity protected inputs. The unit accepts standard 1/8" or 5/32" I.D. tubing to the pressure ports. The various Output Ranges and Pressure Ranges are all field selectable with DIP switches, and the auto-zeroing process is very simple (flip a switch, wait five seconds, flip it back and walk away).



ZPS Pressure Sensor

Patent Pending



Specifications

Power:

7 to 40 VDC (4 to 20 mA output)
7 to 40 VDC or 18 to 28 VAC (0 to 5 VDC output)
13 to 40 VDC or 18 to 28 VAC (0 to 10 VDC output)

Load Resistance:

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

Power Consumption:

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

Accuracy at 72 °F: ±0.25% on all ranges

Stability: ±0.25 % F.S. (full scale) per year

Temperature Error:

Zero: ±0.025% F.S. per °C,
Span: max ±0.03% F.S. per °C

Environmental Operation Range:

14°F to 140°F (-10°C to 60°C)

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

Overpressure: Proof: 2 PSI, Burst: 3 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-inch tubing (1/8" to 3/16" I.D.)

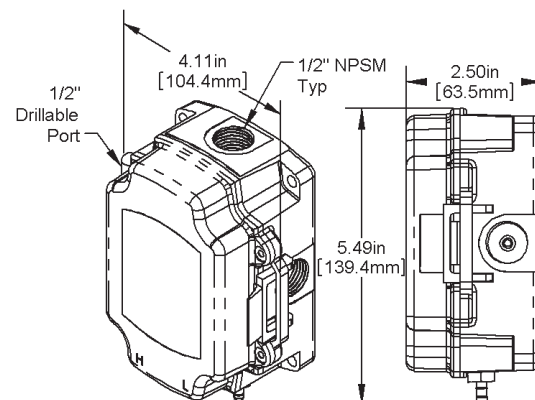
Enclosure Material:

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.





High Pressure Sensor (up to 30" W.C.)

Rev. 12/19/16

Zone Pressure Sensors (ZPS)

C11

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

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ZPS-HR-BB-NT-D-IN	ZPS High Pressure with Display, W.C. Ranges, No Tube or Probe included
ZPS-HR-BB-ST-D-IN	ZPS High Pressure with Display, W.C. Ranges with Static Pressure Probe
ZPS-HR-BB-AT-D-IN	ZPS High Pressure with Display, W.C. Ranges with Attached Static Tube
ZPS-HR-BB-NT-D-PA	ZPS High Pressure with Display, Pascal Ranges, No Tube or Probe included
ZPS-HR-BB-ST-D-PA	ZPS High Pressure with Display, Pascal Ranges with Static Pressure Probe
ZPS-HR-BB-AT-D-PA	ZPS High Pressure with Display, Pascal Ranges with Attached Static Tube
ZPS-HR-BB-NT-IN	ZPS High Pressure without Display, W.C. Ranges, No Tube or Probe included
ZPS-HR-BB-ST-IN	ZPS High Pressure without Display, W.C. Ranges with Static Pressure Probe
ZPS-HR-BB-AT-IN	ZPS High Pressure without Display, W.C. Ranges with Attached Static Tube
ZPS-HR-BB-NT-PA	ZPS High Pressure without Display, Pascal Ranges, No Tube or Probe
ZPS-HR-BB-ST-PA	ZPS High Pressure without Display, Pascal Ranges with Static Pressure Probe
ZPS-HR-BB-AT-PA	ZPS High Pressure without Display, Pascal Ranges with Attached Static Tube

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

High Range ZPS Pressure Option Selection Guide

ZPS - (#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

#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
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#2: High Pressure Range (Required)

WC Ranges

HR31.....	0 to 5
HR32.....	0 to 10
HR33.....	0 to 15
HR34.....	0 to 25
HR35.....	0 to 30

Pascal Ranges

HR41.....	0 to 1,250
HR42.....	0 to 2,500
HR43.....	0 to 4,000
HR44.....	0 to 6,000
HR45.....	0 to 7,400

Example Number: ZPS - (05) - (HR32) - (BB-ST) - (D)

Actual Number (with parenthesis removed): ZPS-05-HR32-BB-ST-D

Description: 0-5 V Output, 0 to 10" WC Pressure Range, ZPS Unit with Static Tube and Display.

Your Number: ZPS-

