



PRESSURE

DIFFERENTIAL PRESSURE TRANSMITTER

ZPS SERIES

DESCRIPTION

The **BAPI ZPS Series Differential Pressure Transmitter** is an accurate, rugged and economical solution for measuring and reporting duct/building static pressure, room-to-room differential pressure or air flow velocities/volumes. The **ZPS Series** micro-machined silicon piezoresistive pressure sensor is specifically developed for low differential pressure. The sensor's custom ASIC (Application Specific Integrated Circuit) provides five-point error correction over the compensated temperature range for excellent accuracy, repeatability and stability.



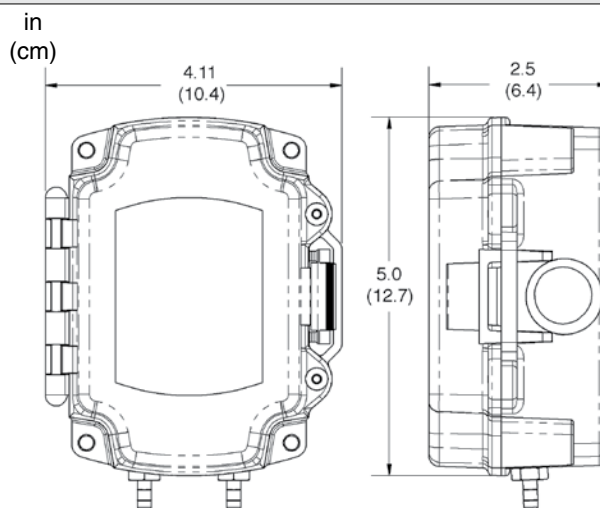
ZPS Series



FEATURES

- *Field-selectable ranges and output signals*
- *Five direct and five bidirectional standard ranges*
- *4-20 mA, 0-5 VDC, or 0-10 VDC output signal*
- *Inches of water or Pascal engineering units*
- *Optional large LCD display*
- *Microprocessor controlled auto-zero*
- *Rugged IP66 (NEMA 4) housing*
- *Short-circuit proof and polarity protected*
- *Three-year warranty*

DIMENSIONS

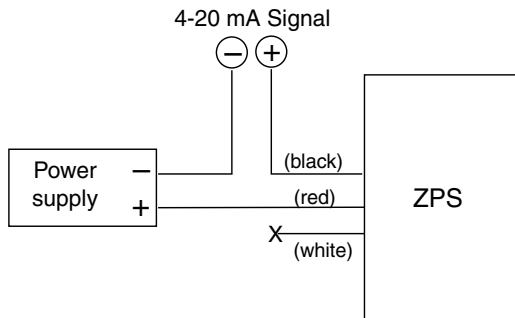


SPECIFICATIONS

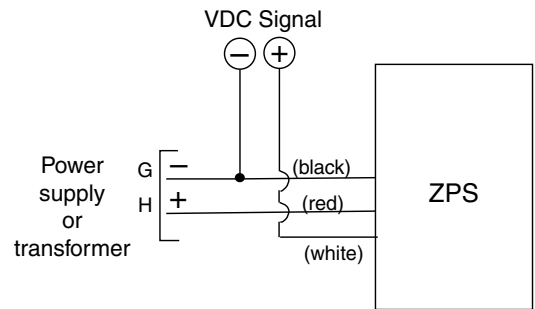
Supply Voltage	7 to 40VDC @ 20 mA	Operating Humidity	0 to 95% Non-condensing
Current Output	18 to 32 VAC @ 0.12VA,	Wetted Parts	Silicone
Volts Output	13 to 40 VDC @ 4.9 mA	Media Compatibility	Inert dry air
Accuracy	±0.25% of range @72°F (NIST included)	Process Connection	3/16" OD brass, for 1/4" OD tubing
Signal Output	0-5/10V @ 1KΩ, 4-20mA @ 1850Ω	Wiring	3 plug-in terminals 2-(4-20mA), 3-(Volts)
Sensor Type	Capacitive	Mounting	2 or 4, #10 screws (vertical position)
Adjustments	Range select from DIP switches	Enclosure Rating	UV-Polycarbonate UL94-V0, NEMA 4, (IP66)
Normal Measurement Range	0 to 5"WC, Uni- or Bi- Directional	Dimensions	4.1"W x 5.49"H x 2.5"D, (10.4 x 13.9 x 6.4 cm)
Display	LCD, 4 digits, 0.37" high (readout may be neutralized)	Weight	1.0 lb (0.45 Kg)
Overpressure	(Burst) ±41.52"WC (10.34 kPa)	Approvals	CE, RoHS
Max Operating Pressure	(Proof) ±27.67"WC, (±6.89 kPa)	Warranty	3 years
Operating Temperature	-4 to 140°F (-20 to 60°C)		



WIRING



4-20 mA Wiring
(See specifications for power supply information)



0-5 VDC or 0-10 VDC Wiring
(See specifications for power supply information)

ORDERING INFORMATION

MODEL	DESCRIPTION						
ZPT	Differential pressure transmitter						
OUTPUT RANGE							
20	4-20 mA (7 to 45 VDC supply ONLY)						
CHOOSE RANGE NUMBER, EITHER LOW RANGE OR STANDARD RANGE							
##	LR- Low range: pressure ranges 0 to 1" W.C., +/-1.0"W.C.	SR - Standard ranges: pressure ranges greater than 1.0"W.C., +/-2.5"					
Option	Range ("W.C.)	Option	Range (Pa)	Option	Range ("W.C.)	Option	Range (Pa)
51	0 to 0.10	61	0 to 30	71	0 to 1.00	81	0 to 250
52	0 to 0.25	62	0 to 50	72	0 to 2.00	82	0 to 300
53	0 to 0.50	63	0 to 100	73	0 to 2.50	83	0 to 500
54	0 to 0.75	64	0 to 175	74	0 to 3.00	84	0 to 1000
55	0 to 1.00	65	0 to 500	75	0 to 5.00	85	0 to 1250
56	-0.10 to 0.10	66	-30 to 30	76	-1.00 to 1.00	86	-250 to 250
57	-0.25 to 0.25	67	-50 to 50	77	-2.00 to 2.00	87	-300 to 300
58	-0.50 to 0.50	68	-100 to 100	78	-2.50 to 2.50	88	-500 to 500
59	-0.75 to 0.75	69	-175 to 175	79	-3.00 to 3.00	89	-1000 to 1000
60	-1.00 to 1.00	70	-250 to 250	80	-5.00 to 5.00	90	-1250 to 1250
ENCLOSURE							
BB	BAPI Box						
STATIC PRESSURE PROBE (MUST SELECT ONE)							
NT	No tube or probe included						
ST	Static pressure measurement probe						
AT	Attached static pressure probe (Not available with back mount (BM))						
BACK MOUNT OPTION							
BM	Back mount						

ZPT

20

52

BB

NT

BM

Example: ZPT-20-52-BB-NT-BM Differential pressure transmitter with 4-20 mA output range, standard

ENCLOSURE	
BB	BAPI Box
STATIC PRESSURE PROBE (MUST SELECT ONE)	
NT	No tube or probe included
ST	Static pressure measurement probe
AT	Attached static pressure probe (Not available with back mount (BM))
BACK MOUNT OPTION	
BM	Back mount

Example: ZPT-20-52-BB-NT-BM Differential pressure transmitter with 4-20 mA output range, standard 0 to 0.25 pressure range, no tube or probe, back mount

OPTIONAL (for units without a factory specified range or output that can be set in the field)	
Part #	Description
ZPT-LR-BB-NT-D	Zone pressure touch sensor, low ranges, no tube or probe included
ZPT-LR-BB-ST-D	Zone pressure touch sensor, low ranges, with static pressure probe
ZPT-LR-BB-AT-D	Zone pressure touch sensor, low ranges, with attached static tube
ZPT-SR-BB-NT-D	Zone pressure touch sensor, standard ranges, no tube or probe included
ZPT-SR-BB-ST-D	Zone pressure touch sensor, standard ranges, with static pressure probe
ZPT-SR-BB-AT-D	Zone pressure touch sensor, standard ranges, with attached static tube

RELATED PRODUCTS

- A-301-K Duct static pressure tip, 1/4" compression
- A-302-K Duct static pressure tip, 1/4" barb
- A-308-K Duct static pressure fitting, 1/4" barb
- A-345-K Flange mounting kit (1 required for each A-301-K or A-302-K)
- RPS Stainless steel room pressure sensor, 1/4" barb
- RPS-I Ivory plastic room pressure sensor, 1/4" barb
- RPS-W White plastic room pressure sensor, 1/4" barb
- SD-01 Surge dampener
- T-101 1/4" OD black poly tubing, 1 coil, 250 ft (76 m)
- ZPS-ACC01 2" X 4" Stainless steel wall plate with static pickup
- ZPS-ACC10 Rooftop or wall-mount outside air pressure pickup port
- ZPS-ACC12 Pitot pressure probe assy, 6" long (includes static & total probe assy)