

Low Differential Pressure Transmitters



ACI/DP SERIES



Product Description

The ACI/DP series is a line of low differential pressure transmitters that are capable of sensing full scale ranges down to 0.25" of water column. Each ACI pressure transmitter utilizes a high quality ceramic capacitive sensor to provide long term stability and performance. Variable capacitance sensors have a good signal to noise ratio and are not plagued by temperature drift.

The transmitter electronics provides either a two-wire, linear 4 to 20 mA or a three-wire, 0 to 5 or 0 to 10 VDC output signal. Accuracy is +/- 1% of full scale over the compensated temperature range. The transmitter may be powered by a regulated, +15-36 VDC or 24 VAC supply, and is polarity sensitive. In addition to the requested span, each transmitter is capable of being field adjusted to three additional spans, by resetting the internal jumpers. A slight zero

offset may be needed. This feature provides greater flexibility in the field. Commonly available spans are 0 to 0.25", -0.5 to 0.5", 0 to 1", 0 to 2.0", and 0 to 5".

ACI pressure transmitters may be used in many different applications including:

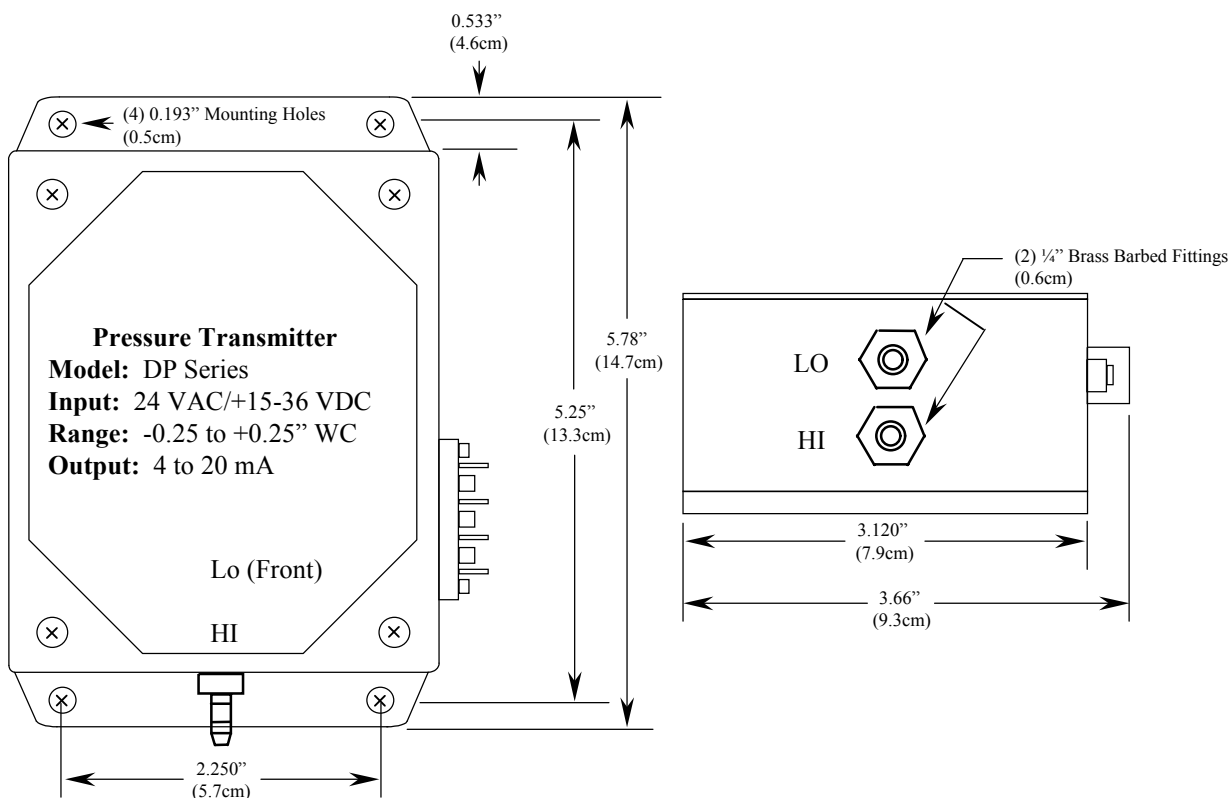
- ☐ • Static Pressure Control
- ☐ • Leak Detection
- ☐ • Monitoring Filter Blockage
- ☐ • Pneumatic Controls
- ☐ • Variable Air Volume Systems (VAV's)

When used in combination with an ACI/PT, ACI/SPT, or ACI/VPT style pitot tubes, flow and static pressures can be measured and controlled in ducts. All ACI/DP low differential pressure transmitters come factory calibrated with a two year factory warranty. Please contact ACI for more information regarding any of these products.

Product Specifications

Supply Voltage	250 Ohm Load: +15 to 36 VDC / 24 VAC 500 Ohm Load: +19 to 36 VDC / 24 VAC	Operating Temperature Range	-10 to 60°C (14 to 140°F)
Output Ranges	2-wire, 4 to 20mA DC Current 3-wire, 0-5, 0-10 VDC, or 4-20mA	Compensated Temperature Range	10 to 40°C (50 to 104°F)
Response Time	15 msec - 63% full scale step	Linearity	+/- 0.5% of span
Position Effect	2% Null shift from vertical to horizontal	Pressure Fittings	1/4" barbed fitting (Brass)
Pressure Overload	Span < 2" H ₂ O	Temperature Error	Span < 2" H ₂ O
Positive Pressure	5X	Zero	+/- 3.0% FSO
Negative Pressure	3X	Span	+/- 4.0% FSO
	Span > 2" H ₂ O		Span > 2" H ₂ O
Positive pressure	5X	Zero	+/- 1.5% FSO
Negative pressure	3X	Span	+/- 1.5% FSO
Transmitter Accuracy	+/- 1% of span	Screw Terminal	18-22 AWG Wire

Dimensions



For CE compliance, sensor leads must be no longer than 3 meters in length. Additionally, certain product variations may not be CE compliant. Contact ACI for further details

Ordering Information

Model#	Standard Span	Output
A /DP []	[]	[]
↑	↑	↑
(1)	+/- 1.0"	(5) 0 to 5 VDC
(2)	+/- 0.5"	(10) 0 to 10 VDC
(3)	+/- 0.25"	(20) 4 to 20 mA
(4)	0 to 0.25"	
(5)	0 to 0.5"	
(6)	0 to 1.0"	
(7)	0 to 2.0"	
(8)	0 to 3.0"	
(9)	0 to 5.0"	
(10)	0 to 10.0"	
(11)	Please Specify	

**Table of Jumper Selectable Ranges
for all DP Model# to the left**

DP1	+/- 2.0"	N/A	N/A
DP2	+/- 0.3"	N/A	N/A
DP3	+/- 0.5"	N/A	N/A
DP4	0 to 0.5"	0 to 0.4"	0 to 0.3"
DP5	0 to 0.4"	0 to 0.3"	0 to 0.25"
DP6	0 to 0.8"	0 to 0.6"	0 to 0.5"
DP7	0 to 2.5"	0 to 1.5"	0 to 1.25"
DP8	0 to 5.0"	0 to 4.0"	0 to 2.5"
DP9	0 to 4.0"	0 to 3.0"	0 to 2.5"
DP10	0 to 8.0"	0 to 6.0"	0 to 5.0"

Example: A/DP -(9) -(0 to 5.0") -(20) or ACI/DP -(6) -(0 to 1.0") -(5)

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