



ADP (+/- 0.25% ACCURACY) DIFFERENTIAL LOW PRESSURE (UNI/BIDIRECTIONAL)

The ADP Series is based on a piezoresistive, silicon sensing element which senses Differential Pressure and provides an analog output. The hinged cover on the ADP can be easily opened using the integrated locking tab on the side of the enclosure. This allows for easy access to the zero function and field selectable ranges and outputs. The ADP Series also includes an optional, five digit LCD for installation and monitoring support.

The standard accuracy is $\pm 0.25\%$ FSO. Field selectable analog outputs include 0-5 and 0-10 VDC, or 4-20mA which correlate to a specific uni or bidirectional pressure range from 0-0.1" up to 0-40" of water column, depending on your model selection. Each unit must be ordered with the specific pressure range needed to meet desired application requirements. Options include a Pitot Tube or Din Rail Clip.

Applications Include: building and duct static pressure, filter monitoring, airflow measurement, and process control.

PRODUCT SPECIFICATIONS

Supply Voltage	4-20 mA Output: 16-36 VDC (250 Ohm Load max.) / 22-36 VDC (500 Ohm Load max.) 0-5 VDC / 0-10 VDC Output: 16-36 VDC / 24 VAC (+/- 10%)
Supply Current	4-20 mA Output: 24 mA minimum 0-5 VDC / 0-10 VDC Output: 6 mA maximum
Output Signals	Current Output: 4-20 mA, 2-Wire Loop Powered (Standard); (Current limited to 21.4 mA max) Voltage Signals: 0-5 VDC / 0-10 VDC Field Selectable, 3-Wire; Output limited @ 5.25 & 10.5 VDC
Response Time (0-100% FSO)	8 seconds
Output Update Rate	1 second
Pressure Ranges	Specify Single Range (See "Ordering" on Reverse Side)
Accuracy ¹	+/- 0.25% FSO (All ranges except +/- 0.1 w.c. (+/- 25 Pa) +/- 0.50% FSO)
Zero Function	Pushbutton Zero Function
Thermal Effects ²	+/- 0.067% FSO / °F (0.12% FSO / °C)
Proof Pressure ³	ADP-001-W-x-A-0P: 270 inWC (67.2 kPa) for 1 inWC (249.8 Pa) range ADP-010-W-x-A-0P: 350 inWC (87.12 kPa) for 10 inWC (2490.8 Pa) range ADP-040-W-x-A-0P: 562 inWC (140 kPa) for 40 inWC (9963.6 Pa) range
Burst Pressure ³	ADP-001-W-x-A-0P: 415 inWC (103.3 kPa) for 1 inWC (249.8 Pa) range ADP-010-W-x-A-0P: 550 inWC (136.9 kPa) for 10 inWC (2490.8 Pa) range ADP-040-W-x-A-0P: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa) range
Operating Temperature Range	-4 to 185°F (-20 to 85°C)
Compensated Temperature Range	32 to 122°F (0 to 50°C)
Storage Temperature Range	-22 to 185°F (-30 to 85°C)
Operating Humidity Range	10 to 95% RH, non-condensing
Media Types	Dry air or inert non-conductive gases
Enclosure Material /Flammability Rating	Flame Retardant Polycarbonate; UL94-5V
Wiring Connections	Finger Pushbutton Spring Terminal Blocks; accepts 16-24 AWG wires
Conduit Knockouts	Watertight Cordgrip Installed (1/2" NPT Conduit fittings accepted when Cordgrip removed)
Pressure Fitting Material	Nickel Plated Brass or Stainless Steel
Tubing Size Accepted	1/4" O.D. x 0.170" I.D. Poly Tubing
N.I.S.T. Certification	3 Point N.I.S.T. Test Points: 10%, 50%, & 90% FSO 5 Point N.I.S.T. Test Points: 10%, 30%, 50%, 70%, & 90% FSO
Approvals	CE, Reach, RoHS2, WEEE
Product Weight (No Pitot Tube OR Din Rail)	Non-LCD Display Version: 0.53 lbs (0.240 kg) LCD Display Version: 0.58 lbs (0.263 kg)
Product Weight (With Pitot Tube & Din Rail)	Non-LCD Display Version: 0.80 lbs (0.363 kg) LCD Display Version: 0.85 lbs (0.385 kg)

Note¹: Accuracy includes linearity, hysteresis & repeatability. Note²: Shift is relative to 77°F (25°C). Note³: "x" designates both the LCD "-D-" & Non-LCD Display "-N-" versions

DIMENSIONAL DRAWING



Front View



Right View



Top View

ADDITIONAL PRODUCT INFORMATION

The ADP Series pressure transmitters incorporate a piezoresistive silicon sensing element to enable low pressure measurements. Integrated temperature compensation with offset and span calibration extends the performance of these devices to provide excellent long-term reliability. All units are calibrated using N.I.S.T. certified calibration equipment. A Pushbutton Zero function is included for making zero adjustments. The color coded terminal blocks are easily accessible and spring loaded to aid in installation.

ORDERING

* (Pascal Ranges Only) | ** (Water Column or Pascal Ranges Available)

Part

ORDERING		Part #
A. Sensor Series No Selection Required	A/ADP	A/ADP
B. Differential Pressure Range Select One (1) Range	D10 (0.10) 2D5 (2.5) 15 (15) 050 (50)* 500 (500)* 2K5 (2,500)* D25 (0.25) 003 (3) 020 (20) 100 (100)* 750 (750)* 3K2 (3,200)* D50 (0.50) 004 (4) 025 (25)** 125 (125)* 1K0 (1,000)* 5K0 (5,000)* 001 (1) 005 (5) 030 (30) 250 (250)* 1K2 (1,250)* 7K5 (7,500)* 002 (2) 010 (10) 040 (40) 300 (300)* 1K6 (1,600)* 10K (10,000)*	
C. Units Select Water Column or Pascal	W (Water Column) P (Pascal)	
D. Bi/Uni Directional Select Bi or Unidirectional	U (Unidirectional, Example: 0 to 1 w.c.) B (Bidirectional, Example: -1 to 1 w.c.)	
E. Display Select No Display, or w/ Display	N (No LCD Display) D (W/ LCD Display)	
F. Accuracy No Selection Required	B (+/- 0.25%)	B (+/- 0.25%)
G. Pitot Tube / Din Rail Select Pitot Tube and/or Din Rail	0 (No Pitot Tube or Din Rail) 2 (W/ Din Rail) 1 (W/ Pitot Tube) 3 (W/ Pitot Tube & Din Rail)	
H. Analog Output Select One (1) Output	A (4 to 20 mA) C (0-10 VDC) B (0-5 VDC)	
I. N.I.S.T. Select One (1) N.I.S.T. Option	0P (None) 5P (5 Point) 3P (3 Point)	
J. Enclosure No Selection Required	S (Standard)	S (Standard)

Part Number Example: A/ADP - 500 - W - B - D - B - 1 - A - 3P - S

A. B. C. D. E. F. G. H. I. J.