



# DLP (+/- 0.25% Accuracy)

## Differential Low Pressure (Uni/Bidirectional)

The DLP Series is based on a piezoresistive, silicon sensing element which senses Differential Pressure and provides an analog output. The hinged cover on the DLP 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 DLP Series also includes an optional, five digit LCD for installation and monitoring support.

The standard accuracy is ±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.

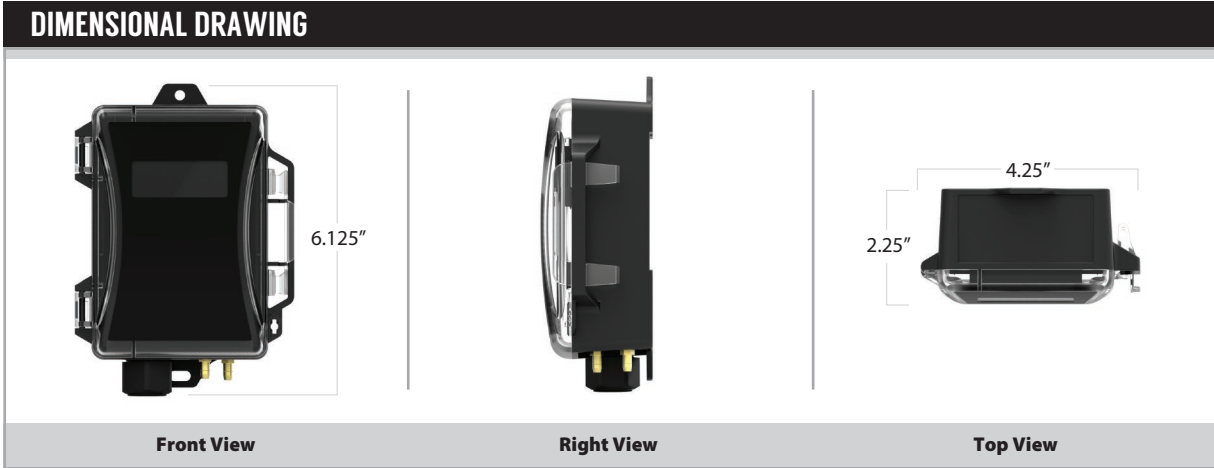
**Applications Include: building and duct static pressure, filter monitoring, air flow measurement, and process control.**

### PRODUCT SPECIFICATIONS

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

Note<sup>1</sup>: Accuracy includes linearity, hysteresis & repeatability. | Note<sup>2</sup>: Shift is relative to 77°F (25°C). | Note<sup>3</sup>: "x" designates both the LCD "-D-" & Non-LCD Display "-N-" versions





**ADDITIONAL PRODUCT INFORMATION**

The DLP 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.

**The DLP Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, [www.workaci.com](http://www.workaci.com).**

ORDERING		* (Pascal Ranges Only)   ** (Water Column or Pascal Ranges Available)					Part #
<b>A. Sensor Series</b> No Selection Required	A/DLP					A/DLP	
<b>B. Differential Pressure Range</b> Select One (1) Range	D10 (0.10) D25 (0.25) D50 (0.50) 001 (1) 002 (2)	2D5 (2.5) 003 (3) 004 (4) 005 (5) 010 (10)	015 (15) 020 (20) 025 (25)** 030 (30) 040 (40)	050 (50)* 100 (100)* 125 (125)* 250 (250)* 300 (300)*	500 (500)* 750 (750)* 1K0 (1,000)* 1K2 (1,250)* 1K6 (1,600)*	2K5 (2,500)* 3K2 (3,200)* 5K0 (5,000)* 7K5 (7,500)* 10K (10,000)*	
<b>C. Units</b> Select Water Column or Pascal	W (Water Column) P (Pascal)						
<b>D. Bi/Uni Directional</b> Select Bi or Unidirectional	U (Unidirectional, Example: 0 to 1 w.c.) B (Bidirectional, Example: -1 to 1 w.c.)						
<b>E. Display</b> Select No Display, or w/ Display	N (No LCD Display) D (W/ LCD Display)						
<b>F. Accuracy</b> No Selection Required	B (+/- 0.25%)					B (+/- 0.25%)	
<b>G. Pitot Tube / Din Rail</b> Select Pitot Tube and/or Din Rail	0 (No Pitot Tube or Din Rail) 1 (W/ Pitot Tube)		2 (W/ Din Rail) 3 (W/ Pitot Tube & Din Rail)				
<b>H. Analog Output</b> Select One (1) Output	A (4 to 20 mA) B (0-5 VDC)		C (0-10 VDC)				
<b>I. N.I.S.T.</b> Select One (1) N.I.S.T. Option	OP (None) 3P (3 Point)		5P (5 Point)				
<b>J. Enclosure</b> No Selection Required	S (Standard)					S (Standard)	

Part Number Example: A/DLP - 500 - W - B - D - B - 1 - A - 3P - S  
A. B. C. D. E. F. G. H. I. J.

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