



DLP (+/- 0.50% Accuracy)

Differential Low Pressure (Uni/Bi-Directional)

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. Field selectable analog outputs include 0-5 and 0-10 VDC, or 4-20 mA which correlate to a uni or bi-directional pressure range from 0-0.1" up to 0-40" of water column, depending on your model selection. Each unit has up to 8 field selectable, uni or bi-directional ranges. Options include a Pitot Tube or Din Rail Clip.

Applications: Building and Duct Static Pressure, Filter Monitoring, Air Flow Measurement, and Process Control

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 website, www.workaci.com.

PRODUCT SPECIFICATIONS

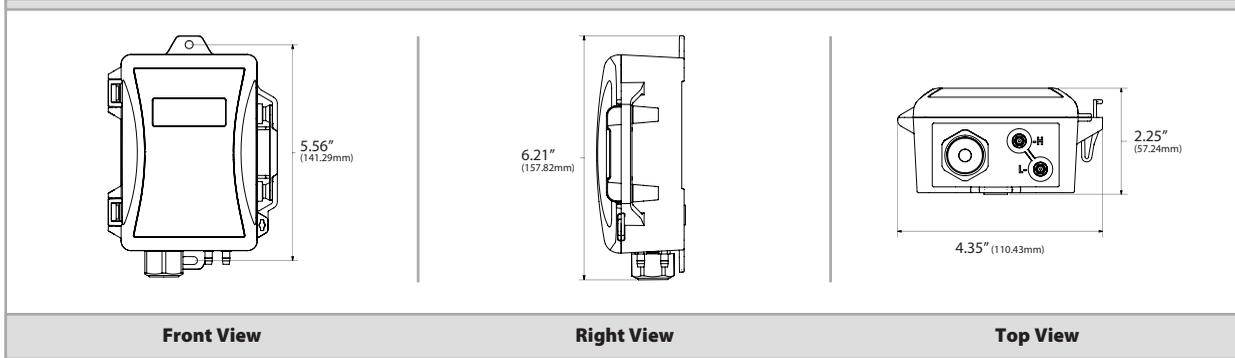
| | |
|---|--|
| Supply Voltage: | 4-20 mA Output: 16-36 VDC (250 Ohm Load max.) / 22-36 VDC (500 Ohm Load max.) / 24 VAC(+/-10%) 50/60 Hz |
| | 0-5 VDC / 0-10 VDC Output: 15-36 VDC into > 5K Ohm Load / 24 VAC (+/- 10%), 50/60 Hz |
| Supply Current: | 4-20 mA Output: 24 mA minimum (0.83 VA) 0-5 VDC / 0-10 VDC Output: 6 mA maximum (0.18 VA) |
| Output Signals: | Current Output: 4-20 mA, 2-Wire Loop Powered (Default); Current limited to 21.5 mA maximum Voltage Signals: 0-5 VDC / 0-10 VDC Field Selectable, 3-Wire; Output limited @ 5.25 & 10.5 VDC |
| Response Time (0-100% FSO): | 4 seconds |
| Output Update Rate: | 0.5 second intervals |
| Pressure Ranges: | See Product Ordering Grid (next page); Field Selectable Uni and Bi-Directional Ranges |
| Accuracy 1: | +/- 0.50% FSO |
| Zero Function: | Pushbutton Zero Function |
| Thermal Effects 2: | +/- 0.067% FSO / °F (0.12% FSO / °C) |
| Proof Pressure Burst Pressure: | A/DLP-001: Proof: 270 inWC (67.2 kPa) Burst: 415 inWC (103.3 kPa) for 1 inWC (249.8 Pa) A/DLP-010: Proof: 350 inWC (87.12 kPa) Burst: 550 inWC (136.9 kPa) for 10 inWC (2490.8 Pa) A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa) |
| 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: | Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases |
| Enclosure Material Flammability Rating: | Flame Retardant Polycarbonate; UL94-5VA |
| 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 |
| Approvals: | CE, Reach, RoHS2, WEEE |
| Product Weight (No Pitot Tube / 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 @ 71°F (21.5°C) | **Note²:** Shift is relative to 71°F (21.5°C)





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: **A** | **DLP** | **001** | **W** | **U** | **N** | **A** | **0** -OR- **140769**

| Model # | Item # | Ranges (Default in Bold) | Outputs (Default in Bold) | LCD* | PT* | DRC* |
|----------------------------|--------|--|------------------------------------|------|-----|------|
| A/DLP-001-W-U-N-A-0 | 140769 | 0-0.1", 0.2", 0.5", 1" ±0.1", ±0.2", ±0.5", ±1" | 4-20 mA , 0-5 VDC, 0-10 VDC | | | |
| A/DLP-001-W-U-D-A-0 | 140773 | 0-0.1", 0.2", 0.5", 1" ±0.1", ±0.2", ±0.5", ±1" | 4-20 mA , 0-5 VDC, 0-10 VDC | ● | | |
| A/DLP-010-W-U-N-A-0 | 140774 | 0-1", 2", 5", 10" ±1", ±2", ±5", ±10" | 4-20 mA , 0-5 VDC, 0-10 VDC | | | |
| A/DLP-010-W-U-D-A-0 | 140776 | 0-1", 2", 5", 10" ±1", ±2", ±5", ±10" | 4-20 mA , 0-5 VDC, 0-10 VDC | ● | | |
| A/DLP-040-W-U-N-A-0 | 140777 | 0-10", 20", 30", 40" ±10", ±20", ±30", ±40" | 4-20 mA , 0-5 VDC, 0-10 VDC | | | |
| A/DLP-040-W-U-D-A-0 | 140778 | 0-10", 20", 30", 40" ±10", ±20", ±30", ±40" | 4-20 mA , 0-5 VDC, 0-10 VDC | ● | | |
| A/DLP-001-W-U-N-A-3 | 141072 | 0-0.1", 0.2", 0.5", 1" ±0.1", ±0.2", ±0.5", ±1" | 4-20 mA , 0-5 VDC, 0-10 VDC | | ● | ● |
| A/DLP-001-W-U-D-A-3 | 141073 | 0-0.1", 0.2", 0.5", 1" ±0.1", ±0.2", ±0.5", ±1" | 4-20 mA , 0-5 VDC, 0-10 VDC | ● | ● | ● |
| A/DLP-010-W-U-N-A-3 | 141074 | 0-1", 2", 5", 10" ±1", ±2", ±5", ±10" | 4-20 mA , 0-5 VDC, 0-10 VDC | | ● | ● |
| A/DLP-010-W-U-D-A-3 | 141075 | 0-1", 2", 5", 10" ±1", ±2", ±5", ±10" | 4-20 mA , 0-5 VDC, 0-10 VDC | ● | ● | ● |
| A/DLP-040-W-U-N-A-3 | 141076 | 0-10", 20", 30", 40" ±10", ±20", ±30", ±40" | 4-20 mA , 0-5 VDC, 0-10 VDC | | ● | ● |
| A/DLP-040-W-U-D-A-3 | 141077 | 0-10", 20", 30", 40" ±10", ±20", ±30", ±40" | 4-20 mA , 0-5 VDC, 0-10 VDC | ● | ● | ● |

LCD* (Display Included) | PT* (Pitot Tube Included) | DRC* (Din Rail Clip Included)

ACCESSORIES ORDERING

DLP

Model # Example: **A/DRC-DLP** -OR- **140999**

| Model # | Item # | Description |
|------------------|--------|---|
| A/PT-DLP | 140998 | Pitot Tube, DLP Duct Static Size: 7" (6.75" Insertion) Material: Aluminum |
| A/DRC-DLP | 140999 | Din Rail Clip, DLP Size: 35 mm |

Note*: Other compatible products include ACI's Pick up Port (A/PUP) Series, Medical Grade Tubing Kit (A/10'), Transformer Series (A/LE) and DC Power Supplies (A/PS1.5 or A/LPR)

ACCESSORIES ORDERING

PITOT TUBES

Model # Example: **A/PT 5.2** -OR- **130141**

| Model # | Item # | Description | Insertion Length | Number of Sensing Points |
|-----------------|--------|---|------------------|--------------------------|
| PT 3" | 130140 | 3.0" Pitot Tube with Foam Gasket | 3.0" (7.6 cm) | 1 Set |
| PT 5.2" | 130141 | 5.2" Pitot Tube with Foam Gasket | 5.2" (13.2 cm) | 2 Sets |
| PT 7.5" | 130142 | 7.5" Pitot Tube with Foam Gasket | 7.5" (19.1 cm) | 3 Sets |
| PT 9.7" | 130143 | 9.7" Pitot Tube with Foam Gasket | 9.7" (24.6 cm) | 4 Sets |
| SPT-3.5" | 102957 | 3.5" Aluminum Duct Static (Flat Tip) Pitot Tube | 3.5" (88.9 mm) | 1 Point |
| SPT-8.0" | 108976 | 8.0" Aluminum Duct Static (Flat Tip) Pitot Tube | 8.0" (203.2 mm) | 1 Point |
| VPT | 103010 | 4.0" Aluminum Velocity (Pointed Tip) Pitot Tube | 4" (101.6 mm) | 1 Point |
| VPT-8" | 125008 | 8.0" Aluminum Velocity (Pointed Tip) Pitot Tube | 8" (203.2 mm) | 1 Point |

ACCESSORIES ORDERING

PICK UP PORTS

Model # Example: **A/SP-PUP** -OR- **125585**

| Model # | Item # | Description | Color |
|------------------|--------|--|-------------------------|
| A/SP-PUP | 125585 | Pickup Port, Wall Mounted Stainless Plate | Brushed Stainless Steel |
| A/R-PUP | 125584 | Pickup Port, Wall Mounted Plastic Enclosure | Beige |
| A/R2-PUP | 132711 | Pickup Port, Wall Mounted Plastic Enclosure | White |
| A/O-PUP-H | 132892 | Pickup Port, Horizontal Mount, Outdoor Weatherproof Euro Enclosure | Light Gray |
| A/O-PUP-V | 132891 | Pickup Port, Vertical Mount, Outdoor Weatherproof Euro Enclosure | Light Gray |

