PRESSURE | DIFFERENTIAL LOW PRESSURE | DLP



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.

| Supply Voltage: | 4-20 mA Output: 16-36 VDC (250 Ohm Load max.) / 22-36 VDC (500 Ohm Load max) / | | |
|---|---|--|--|
| Supply College: | 24 VAC(+/-10%) 50/60 Hz | | |
| | 0-5 VDC / 0-10 VDC Output: 16-36 VDC / 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 V. | | |
| 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 P | | |
| | A/DLP-0 10: Proof: 350 INVC (87.12 kPa) Burst: 550 INVC (150.9 kPa) 101 10 INVC (2490.8 Pa | | |
| | | | |
| Operating Temperature Range: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pc-4 to 185°F (-20 to 85°C) | | |
| | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 P | | |
| Compensated Temperature Range: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 P -4 to 185°F (-20 to 85°C) | | |
| Compensated Temperature Range: Storage Temperature Range: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 P -4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 P4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Part to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: Enclosure Material Flammability Rating: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pc-4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: Enclosure Material Flammability Rating: Wiring Connections: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa -4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases Flame Retardant Polycarbonate; UL94-5VA | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: Enclosure Material Flammability Rating: Wiring Connections: Conduit Knockouts: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa -4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases Flame Retardant Polycarbonate; UL94-5VA Finger Pushbutton (Spring) Terminal Blocks; accepts 16-24 AWG wires | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: Enclosure Material Flammability Rating: Wiring Connections: Conduit Knockouts: Pressure Fitting Material: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Part to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases Flame Retardant Polycarbonate; UL94-5VA Finger Pushbutton (Spring) Terminal Blocks; accepts 16-24 AWG wires Watertight Cordgrip Installed (1/2" NPT Conduit fittings accepted when Cordgrip removed) | | |
| Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: Enclosure Material Flammability Rating: Wiring Connections: Conduit Knockouts: Pressure Fitting Material: Tubing Size Accepted: | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa-4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases Flame Retardant Polycarbonate; UL94-5VA Finger Pushbutton (Spring) Terminal Blocks; accepts 16-24 AWG wires Watertight Cordgrip Installed (1/2" NPT Conduit fittings accepted when Cordgrip removed) Nickel Plated Brass or Stainless Steel | | |
| Operating Temperature Range: Compensated Temperature Range: Storage Temperature Range: Operating Humidity Range: Media Types: Enclosure Material Flammability Rating: Wiring Connections: Conduit Knockouts: Pressure Fitting Material: Tubing Size Accepted: Approvals: Product Weight (No Pitot Tube / Din Rail): | A/DLP-040: Proof: 562 inWC (140 kPa) Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa -4 to 185°F (-20 to 85°C) 32 to 122°F (0 to 50°C) -22 to 185°F (-30 to 85°C) 10 to 95% RH, non-condensing Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases Flame Retardant Polycarbonate; UL94-5VA Finger Pushbutton (Spring) Terminal Blocks; accepts 16-24 AWG wires Watertight Cordgrip Installed (1/2" NPT Conduit fittings accepted when Cordgrip removed) Nickel Plated Brass or Stainless Steel 1/4" O.D. x 0.170" I.D. Poly Tubing | | |

Note¹: Accuracy includes linearity, hysteresis & repeatability @ 71°F (21.5°C) | Note²: Shift is relative to 71°F (21.5°C)





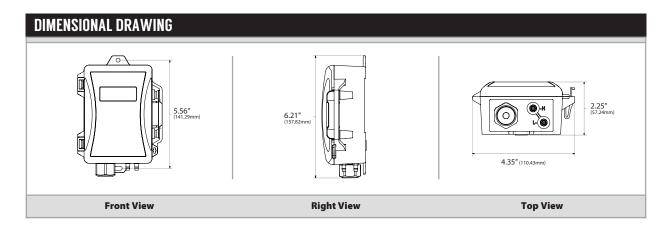






PRESSURE | DIFFERENTIAL LOW PRESSURE | DLP





| STANDARD ORDERING Model # Example: A DLP O01 W U NM DA O OR 14 | | | | | | 140769 | |
|--|--------|-------------------------------|--------------------------|------------------------------------|------|--------|------|
| Model # | Item # | Ranges (Default i | n 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 ORDE | RING | 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/PT5.2 -OR- 1307 | | | | | |
|---|--------|---|------------------|--------------------------|--|
| 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 12558 | | | | |
|--|--------|--|-------------------------|--|
| 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 | |







