

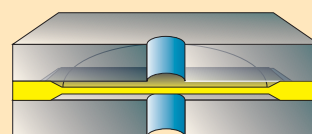
Exclusive XLdp Features

- 10 psi proof pressure including all pressure ranges
- Offering 0.25% accuracy down to 0.05" of water column
- A wide assortment of uni- and bi-directional ranges available
- Nonstandard ranges available
- OEM board level products entertained
- All stainless steel NEMA 2 construction

Model XLdp Transmitter

Featuring a highly reliable variable capacitance sensor using a patented silicon glass topology. This ultra-thin single crystal diaphragm is specifically designed to detect to only one micron of diaphragm deflection.

SENSOR CROSS SECTION



The silicone diaphragm sensor has no glues or other organics to contribute to drift or mechanical degradation over time.

**NOW WITH A
3 YEAR LIMITED
WARRANTY**



CE
APPROVED

ISO 9001
REGISTERED FIRM

DRESSER
Measurement
BULLETIN CT-1

Model XLdp Low Pressure Differential Transducer/Transmitter



PERFORMANCE CHARACTERISTICS

Accuracy Class (F.S.): $\pm 0.25\%$ $\pm 0.50\%$

Non-linearity

Terminal Point*	± 0.2	± 0.4
Best Straight Line	± 0.15	± 0.3
Hysteresis	± 0.02	± 0.02
Non-repeatability	± 0.03	± 0.05
Interchangeability	± 0.25	± 0.50

*Includes hysteresis

Stability (F.S./year): $\pm 0.5\%$

Standard Ranges (Inches W.C.)

Unidirectional Ranges:

Differential or Gage

0/0.1	0/1.0	0/3.0	0/25.0
0/0.25	0/1.5	0/5.0	0/50.0
0/0.5	0/2.0	0/10.0	
0/0.75	0/2.5	0/15.0	

Bidirectional Ranges:

Compound

± 0.05	± 1.0	± 5.0
± 0.1	± 2.0	± 10.0
± 0.25	± 2.5	± 25.0
± 0.5	± 3.0	

Consult factory for non-standard ranges

Response Time: 250m sec

(Consult factory for response time options)

ENVIRONMENTAL CHARACTERISTICS

Temperature Limits:

Storage: -40 to 180°F

Operating: -20 to 160°F

(10-95% R.H. non-condensing)

Compensated Range: $+35$ to 135°F

Thermal Coefficients:

Zero $\pm 0.015\%$ F.S./ $^\circ\text{F}$

Span $\pm 0.015\%$ F.S./ $^\circ\text{F}$

Vibration Sweep: Less than 0.05% F.S.

temporary effect with 5g's 0-60 Hz

EMC: CE compliant to EN61326: 1997

Annex A

FUNCTIONAL CHARACTERISTICS

Overpressure Limits:

Proof 10 psid

Burst 25 psid

Maximum static line pressure: 25 psid

Mounting Position:

0.5" W.C. and higher $\leq 0.10\%$ F.S./g

0.25" W.C. $\leq 0.25\%$ F.S./g

0.1" W.C. $\leq 0.50\%$ F.S./g

ELECTRICAL SPECIFICATIONS

Output Signal: **Power:**

4-20mA* (2 wire) 12-36 Vdc

1-5 Vdc (3 wire) 12-36 Vdc

1-6 Vdc (3 wire) 12-36 Vdc

*Optional CE versions available

Resolution: Infinite

Reverse Wiring Protected

Zero and Span Potentiometers: Externally accessible, non-interactive, $\pm 10\%$ F.S. adjustment.

Supply Current: $< 6\text{mA}$ for voltage output.

Warm-up Time: 10 sec. max. to meet stated specifications

PHYSICAL CHARACTERISTICS

Pressure Connections:

$\frac{1}{4}$ " barbed stainless steel

$\frac{1}{8}$ " barbed stainless steel (optional)

$\frac{1}{4}$ NPT female stainless steel (optional)

Electrical Connections: Terminal strip

Enclosure: NEMA 2

Weight: 14 oz

MATERIALS:

Case: 300 stainless steel

Media: Clean, dry, non-corrosive gas (consult factory for use on other media).

NOT FOR USE ON LIQUIDS

OPTIONS

Pressure Connections:

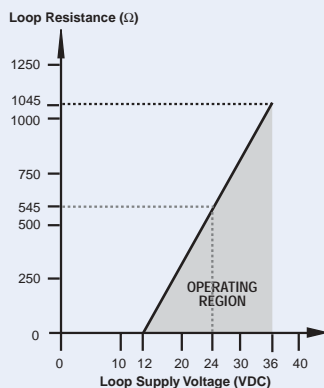
• Non-standard calibration (XCL)

• CE compliant (XCE) 4-20mA only

NOTES:

• Consult factory for additional options including pressure ranges, temperature compensation, packaging variations and signal response time.

Load Limitations 4-20mA Output Only



$$V_{min} = 12V + (.022A \times R_L)$$

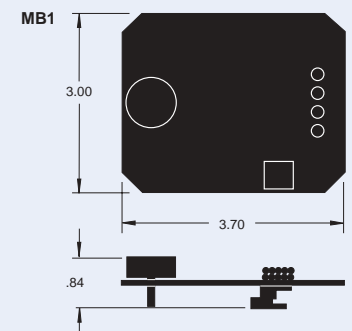
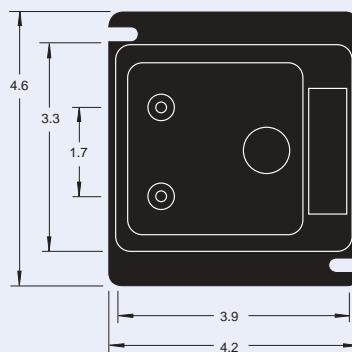
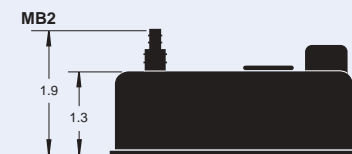
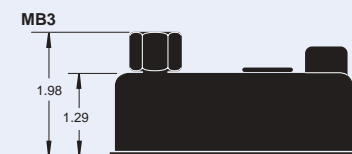
$$R_L = R_S + R_W$$

$$R_L = \text{Loop Resistance (ohms)}$$

$$R_S = \text{Sense Resistance (ohms)}$$

$$R_W = \text{Wire Resistance (ohms)}$$

DIMENSIONS (in inches)



How To Order

X L

Type Configuration
(XLdp)

□

Accuracy/TC
(3) 0.25%, $\pm 0.015\%$ F.S./ $^\circ\text{F}$
(5) 0.50%, $\pm 0.015\%$ F.S./ $^\circ\text{F}$

M B

Pressure Connection
(MB2) $\frac{1}{4}$ " Barbed Stainless Steel
(MB8) $\frac{1}{8}$ " Barbed Stainless Steel
(MB1) No Case
(FO2) $\frac{1}{4}$ " NPTF

□ □

Output Signal
(15) 1-5 Vdc
(16) 1-6 Vdc
(42) 4-20mA

S T

Output Connection
(ST) Screw Terminal

□ □ □ □ □ □

Pressure Range

Diff. or Gauge:	Compound:
(P1IW) 0.10" W.C.	(P05IWL) ± 0.05 " W.C.
(P5IW) 0.50" W.C.	(P1IWL) ± 0.10 " W.C.
(2P5IW) 0.25" W.C.	(P25IWL) ± 0.25 " W.C.
(7P5IW) 0.75" W.C.	(P5IWL) ± 0.50 " W.C.
(1IW) 1.00" W.C.	(1IWL) ± 1.00 " W.C.
(1P5IW) 1.50" W.C.	(2PIWL) ± 2.00 " W.C.
(2IW) 2.00" W.C.	(2P5IWL) ± 2.50 " W.C.
(2P5IW) 2.50" W.C.	(3IWL) ± 3.00 " W.C.
(3IW) 3.00" W.C.	(5IWL) ± 5.00 " W.C.
(5IW) 5.00" W.C.	(10IWL) ± 10.00 " W.C.
(10IW) 10.00" W.C.	(25IWL) ± 25.00 " W.C.
(25IW) 25.00" W.C.	(50IWL) ± 50.00 " W.C.
(50IW) 50.00" W.C.	

X □ □

Optional X-Variations
(XCE) CE compliant with 4-20mA output
(XCL) Non-standard calibration