

# TRANSCAT

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35 Vantage Point Drive Rochester, NY 14624  
Call 1.800.800.5001

# ASHCROFT®

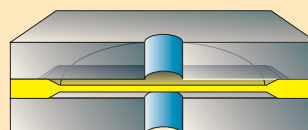
## Exclusive XLdp Features

- 15 psi proof pressure for 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
- All stainless steel NEMA 2 construction
- Factory adjustable damping from 5msec to 1sec.
- On-board voltage regulation allows use of lower cost, non-precise, unregulated power supply

## Model XLdp Transmitter

Featuring a highly reliable variable capacitance sensor using a patented SiGlas™ silicon and glass construction. This ultra-thin single crystal diaphragm is specifically designed to detect less than one micron of diaphragm deflection.

SENSOR CROSS SECTION



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

**NOW  
WITH A 3 YEAR  
WARRANTY**



CE  
APPROVED

**ISO 9001**  
REGISTERED FIRM

**DRESSER**  
Instruments  
BULLETIN CT-1

# Model XLdp Ultra-Low Pressure Differential Transducer/Transmitter



## PERFORMANCE CHARACTERISTICS

<b>Accuracy Class (F.S.):</b>	$\pm 0.25\%$	$\pm 0.50\%$
Non-linearity		
Terminal Point*	$\pm 0.2\%$	$\pm 0.4\%$
Best Fit Straight Line	$\pm 0.15\%$	$\pm 0.3\%$
Hysteresis	$\pm 0.02\%$	$\pm 0.02\%$
Non-repeatability	$\pm 0.03\%$	$\pm 0.05\%$

\*Includes hysteresis

**Stability – Max. Change (F.S./year):**  $\pm 0.5\%$

**Standard Ranges (Inches W.C.)**

**Unidirectional Ranges:**

Differential or Gauge			
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		
$\pm 0.05$	$\pm 1.0$	$\pm 5.0$
$\pm 0.1$	$\pm 2.0$	$\pm 10.0$
$\pm 0.25$	$\pm 2.5$	$\pm 25.0$
$\pm 0.5$	$\pm 3.0$	

**Custom Ranges:** Special range calibrations (XCL) – consult factory

**Standard Response Time:** 250m sec  
(Factory set damping from 5msec. to 1 sec.)  
See options for Fast (XX1) and Slow (XX2) response time

## ENVIRONMENTAL CHARACTERISTICS

**Temperature Limits:**

Storage:  $-40$  to  $180^\circ\text{F}$

Operating:  $-20$  to  $160^\circ\text{F}$

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

Compensated Range:  $+35$  to  $135^\circ\text{F}$

**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 model compliant to EN61326: 1997  
Annex A Harmonized heavy industrial transmitter – specification

## FUNCTIONAL CHARACTERISTICS

**Overpressure Limits:**

Proof 15 psi

Burst 25 psi

Maximum static line pressure: 25 psi

**Mounting Position Effect:**

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

**Note:** Calibrated horizontally standard, unless otherwise specified. Order (XV9) for vertical calibration.

## ELECTRICAL SPECIFICATIONS

<b>Output Signal:</b>	<b>Power:</b>
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

Output signal is independent of power supply changes: 12-36 Vdc range without effect on signal output

**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:** 5 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**

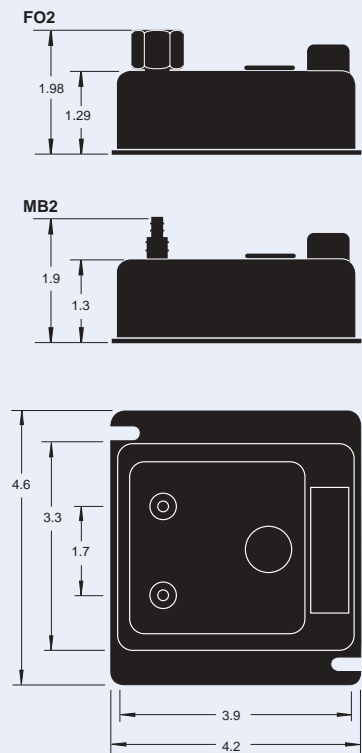
## OPTIONS

- (XCL) Custom calibration
- (XCE) CE compliant 4-20mA only
- (XV9) Calibrated vertically
- (XX1) – Fast response time (5msec)
- (XX2) – Slow response time (1sec)

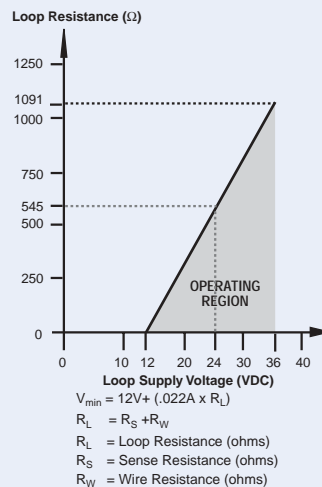
**NOTES:**

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

## DIMENSIONS (in inches)



## Load Limitations 4-20mA Output Only



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**DRESSER**  
Instruments

## 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./ $^\circ\text{F}$

**Pressure Connection**

(MB2)  $\frac{1}{4}$ " Barbed Stainless Steel  
(MB8)  $\frac{1}{8}$ " Barbed Stainless Steel  
(FO2)  $\frac{1}{4}$ " NPTF

**Output Signal**

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

**ST**

**Output Connection**  
(ST) Screw Terminal

**Pressure Range**

Diff. or Gauge:  
(P1IW) 0.10" W.C.  
(P5IW) 0.50" W.C.  
(2P5IW) 0.25" W.C.  
(7P5IW) 0.75" W.C.  
(1IW) 1.00" W.C.  
(1P5IW) 1.50" W.C.  
(2IW) 2.00" W.C.  
(2P5IW) 2.50" W.C.  
(3IW) 3.00" W.C.  
(5IW) 5.00" W.C.  
(10IW) 10.00" W.C.  
(25IW) 25.00" W.C.  
(50IW) 50.00" W.C.

Compound:  
(P05IWL)  $\pm 0.05\%$  W.C.  
(P1IWL)  $\pm 0.10\%$  W.C.  
(P25IWL)  $\pm 0.25\%$  W.C.  
(P5IWL)  $\pm 0.50\%$  W.C.  
(1IWL)  $\pm 1.00\%$  W.C.  
(2PIWL)  $\pm 2.00\%$  W.C.  
(2P5IWL)  $\pm 2.50\%$  W.C.  
(3IWL)  $\pm 3.00\%$  W.C.  
(5IWL)  $\pm 5.00\%$  W.C.  
(10IWL)  $\pm 10.00\%$  W.C.  
(25IWL)  $\pm 25.00\%$  W.C.  
(50IWL)  $\pm 50.00\%$  W.C.

**X**

**Optional X-Variations (XCL)**  
Custom calibration  
**(XCE)**  
CE compliant with 4-20mA output  
**(XV9)**  
Calibrated vertically  
**(XX1)**  
Fast response time  
**(XX2)**  
Slow response time