

## CXLdp Differential Pressure Transmitter

### FEATURES

- Rugged ABS package capable of DIN rail or panel mounting
- LED power status indicator
- Detachable Euro style terminal block
- 22 pressure ranges (STD.) all capable of withstanding 15 psi
- Unidirectional and Bidirectional ranges

### TYPICAL USES

- Fume Hood Control
- Building/Comfort Control System
- Building Energy Management Systems
- HVAC/R
- Critical Environments
- Fan Monitoring
- Duct Flow
- Clean Room
- Filter Monitoring

### PERFORMANCE SPECIFICATIONS

Reference Temperature:	70°F ±2°F (21°C ±1°C)
Accuracy Class:	±0.25%, ±0.4%, ±0.8% of span (Terminal Point Method: includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors)
Stability:	≤±0.25% of span/year at reference conditions
Media Compatibility:	Clean, dry and non-corrosive gas NOT FOR USE ON LIQUIDS
Standard Response Time:	250ms

### ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:	Storage:	-40°F to 180°F (-40°C to 82°C)
	Operating:	0°F to 160°F (-17°C to 71°C)
	Compensated:	35°F to 130°F (1.6°C to 54°C)
Thermal Coefficients:	Zero & Span:	±0.03% of span/°F (From 70°F (21°C) reference temperature)
Humidity Effects:	No performance effect at 10-95% R.H. noncondensing	
CE Marked:	Per DoC EMC Directive 2014/30/EU IEC/EN 61326-1: Edition 1.0 Industrial IEC/EN 61326-2-3: Edition 1.0 Annex BB Industrial RoHS: 2011/65/EU	

### FUNCTIONAL SPECIFICATIONS

Max. Static (Line) Pressure:	Proof:	Burst:
25 psi	15 psid	25 psid
Mounting Position Effect:	±1% of span/g (Calibration in vertical position is STD.)	



CXLdp  
Pressure Transmitter



### KEY BENEFITS

- Broad temperature capability
- High performance ASIC based electronics
- Superior long-term stability and repeatability
- 3 year warranty

### ELECTRICAL SPECIFICATIONS

Circuit Protection:	Reverse polarity and miswire protected		
Potentiometers:	Zero & Span: ±5% of span (Externally accessible)		
Voltage Output:	Supply Voltage:	Supply Current:	
	4-20 mA (2 wire)	12-36 Vdc	21.5 mA
	0-5 Vdc (3 wire)	11.5-36 Vdc or 24 Vac (±20%)	4.5 mA
0-10 Vdc (3 wire)	14-36 Vdc or 24 Vac (±20%)	6 mA	

### PHYSICAL SPECIFICATIONS

Pressure Connections:	¼ brass barbed fittings (male) ½ NPT Female brass
Electrical Connection:	Euro style pluggable terminal block accepts 12-26 gauge wire
Visual Indicator:	LED
Weight:	Approx. 2.5 oz
Mounting:	Threaded fastener and 35mm DIN rail mount
Enclosure Rating:	NEMA 1, Fire-retardant ABS (meets UL94-5VA)

# Data Sheet

## CXLdp Differential Pressure Transmitter

### WETTED MATERIAL

Media

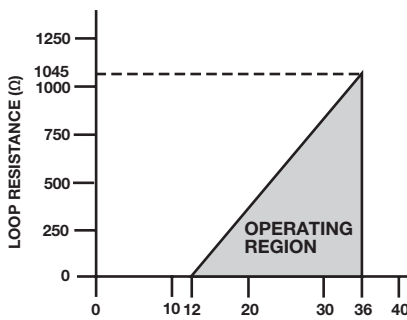
Clean, dry air/gases compatible with Aluminum, Titanium, PBT, Buna, Glass, Gold, Silicone Rubber, Silicon, Silicone RTV and Brass  
NOT FOR USE ON LIQUIDS

### NON-WETTED

Housing

Fire-retardant ABS (Meets UL 94-5VA)

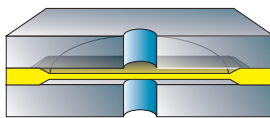
### LOAD LIMITATIONS 4-20 mA OUTPUT ONLY



LOOP SUPPLY VOLTAGE (Vdc)  
 $V_{min} = 12V + [0.022A * (R_L)]$   
 \*includes a 10% safety factor  
 $R_L = R_s + R_w$   
 $R_L$  = Loop Resistance (ohms)  
 $R_s$  = Sense Resistance (ohms)  
 $R_w$  = Wire Resistance (ohms)

Featuring a highly reliable variable capacitance sensor using the patented Ashcroft® Si-Glass™ sensor. This ultra-thin single crystal diaphragm provides inherent sensor repeatability and stability.

### Sensor Cross Section

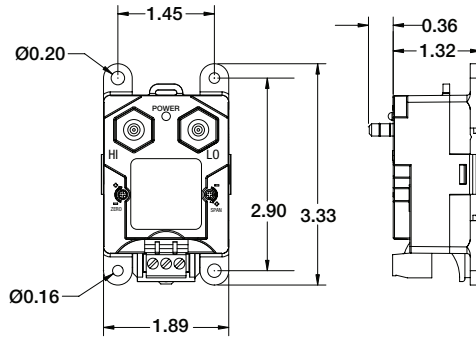


The silicon diaphragm sensor has no glues or other organics to contribute to drift or mechanical degradation over time.

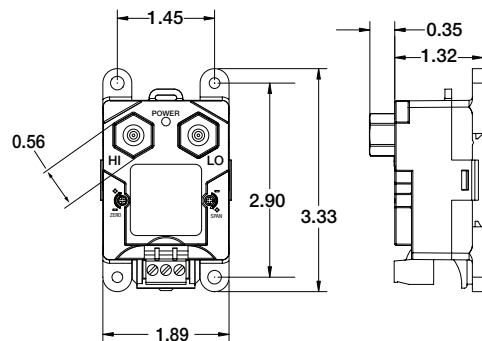
### DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings

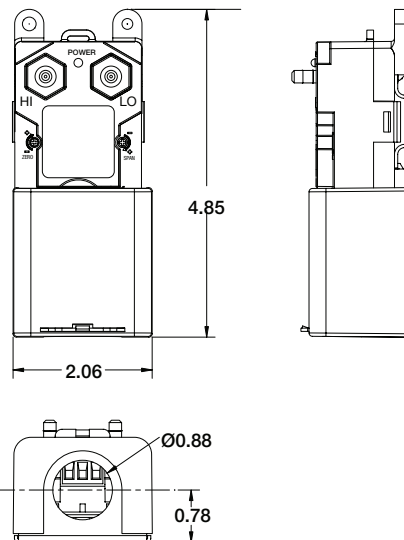
#### “MB2” ¼ BARBED FITTINGS



#### “F01” ½ NPT FEMALE FITTINGS



#### ASSEMBLED WITH 101A213-01 ½” PLENUM/CONDUIT KIT



# Data Sheet

## CXLdp Differential Pressure Transmitter

ORDERING CODE	Example:	CX4	MB2	42	P25IW	-XRH
<b>Model</b>						
CX3 - CXLdp Series, ±0.25% of span, ± 0.03% of span T.C. /°F						
CX4 - CXLdp Series, ±0.40% of span, ± 0.03% of span T.C. /°F		CX4				
CX8 - CXLdp Series, ±0.80% of span, ± 0.03% of span T.C. /°F						
<b>Pressure Connection</b>						
F01 - ½ NPT Female						
MB1 - Board level only, no housing (consult factory)						
MB2 - ¼ Barbed Male			MB2			
<b>Output Signal</b>						
10 - 0-10 Vdc (includes user selectable 0-5 Vdc output)						
42 - 4-20 mA				42		
<b>Pressure Range</b>						
<b>Unidirectional Ranges (differential)</b>						
P1IW - 0.1 IWD						
P25IW - 0.25 IWD					P25IW	
P5IW - 0.50 IWD						
P75IW - 0.75 IWD						
1IW - 1.00 IWD						
2IW - 2.00 IWD						
2P5IW - 2.50 IWD						
3IW - 3.00 IWD						
5IW - 5.00 IWD						
10IW - 10.00 IWD						
15IW - 15.00 IWD						
25IW - 25.00 IWD						
<b>Bi-directional Ranges</b>						
P1IWL - ±0.10 IWD						
P25IWL - ±0.25 IWD						
P5IWL - ±0.50 IWD						
1IWL - ±1.00 IWD						
2IWL - ±2.00 IWD						
2P5IWL - ±2.50 IWD						
3IWL - ±3.00 IWD						
5IWL - ±5.00 IWD						
10IWL - ±10.00 IWD						
15IWL - ±15.00 IWD						
<b>Option (if including an option(s) must include an "X")</b>						
3P - 3 Point calibration data (for CX4 and CX8 only)						-X__
AH - Plenum/conduit kit packaged with CXLdp						
NH - SS tag						
NN - Paper tag						
RH - 9 pt. NIST traceable calibration report (OPT. for CX4 and CX8 only, standard for CX3)						RH