ASHCROFT®
Trust the shield.®

CXLdp Differential Pressure Transmitter

FEATURES

- TruAccuracy™- Terminal Point Accuracy method includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors.
- Rugged ABS package capable of DIN rail or panel mounting
- LED power status indicator
- Detachable Euro style terminal block
- Pressure ranges available down to ±0.05 in H_2O differential
- 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

TruAccuracy™

CXLdp
Pressure Transmitter

RoHS COMPLIANT

CE

KEY BENEFITS

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

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 WITH 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: ±0.03% of span/°F Span: ±0.03% of span/°F (From 70°F 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: 25 psi	Proof: 15 psid	Burst: 25 psid
Mounting Position Effect:	±1% of span/g (Calibration in vertical position is STD.)	

ELECTRICAL SPECIFICATIONS

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

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PHYSICAL SPECIFICATIONS

Pressure Connections:	¼ brass barbed fittings (male) ⅛ 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)

WETTED MATERIAL

Media

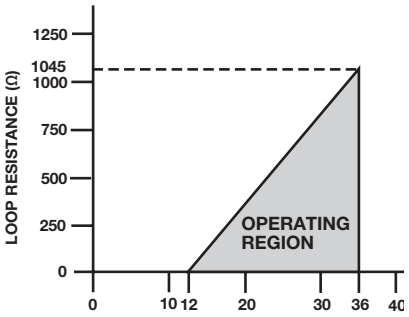
Clean, dry air/gases compatible with Aluminum, Titanium, PBT, Buna, Glass, Gold, Silicone Rubber, Silicon, Silicone RTV and Brass
NOT FOR USE WITH LIQUIDS

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)

TruAccuracy What Does It Mean?

Ashcroft's TruAccuracy™ specification is exclusively based on terminal point methodology instead of statistically derived schemes like 'best fit straight line'.

TruAccuracy™ means the Ashcroft CXLdp has ±0.25% of span accuracy out of the box. Zero and span setting errors are already included in the ±0.25% of span accuracy spec.

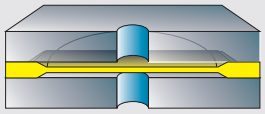
The CXLdp is ready to be installed with no additional calibration adjustments required.

A unit from another manufacturer advertised as ±0.25% best fit straight line may actually be a ±1.25% to ±2.25% device. Using best fit straight line method, the accuracy spec does not include zero and span setting errors, which can be as much as ±1.00% each.

Ashcroft® Si-Glas™ Sensor Technology

Featuring a highly reliable variable capacitance sensor using the patented Ashcroft® Si-Glas™ 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.



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ORDERING CODE Example:	CX4	MB2	42	P25IW	–XRH
Model					
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					
Pressure Connection					
F01 - ⅛ NPT Female					
MB1 - Board level only, no housing (consult factory)					
MB2 - ¼ Barbed Male		MB2			
Output Signal					
10 - 0-10 Vdc (includes user selectable 0-5 Vdc output)					
42 - 4-20 mA			42		
Pressure Range					
Unidirectional Ranges (differential)					
P1IW - 0.1 in. H_2O differential					
P2IW - 0.20 in. H_2O differential					
P25IW - 0.25 in. H_2O differential				P25IW	
P4IW - 0.40 in. H_2O differential					
P5IW - 0.50 in. H_2O differential					
P6IW - 0.60 in. H_2O differential					
P75IW - 0.75 in. H_2O differential					
1IW - 1.00 in. H_2O differential					
2IW - 2.00 in. H_2O differential					
2P5IW - 2.50 in. H_2O differential					
3IW - 3.00 in. H_2O differential					
5IW - 5.00 in. H_2O differential					
10IW - 10.00 in. H_2O differential					
15IW - 15.00 in. H_2O differential					
20IW - 20.00 in. H_2O differential					
25IW - 25.00 in. H_2O differential					
50IW - 50.00 in. H_2O differential					
100IW - 100.00 in. H_2O differential					
Bi-directional Ranges					
P05IWL - ±0.05 in. H_2O differential					
P1IWL - ±0.10 in. H_2O differential					
P25IWL - ±0.25 in. H_2O differential					
P5IWL - ±0.50 in. H_2O differential					
1IWL - ±1.00 in. H_2O differential					
2IWL - ±2.00 in. H_2O differential					
2P5IWL - ±2.50 in. H_2O differential					
3IWL - ±3.00 in. H_2O differential					
5IWL - ±5.00 in. H_2O differential					
8IWL - ±8.00 in. H_2O differential					
10IWL - ±10.00 in. H_2O differential					
15IWL - ±15.00 in. H_2O differential					
25IWL - ±25.00 in. H_2O differential					
50IWL - ±50.00 in. H_2O differential					
Option (if including an option(s) must include an "X")					–X__
3P - 3 Point calibration data (for CX4 and CX8 only)					
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

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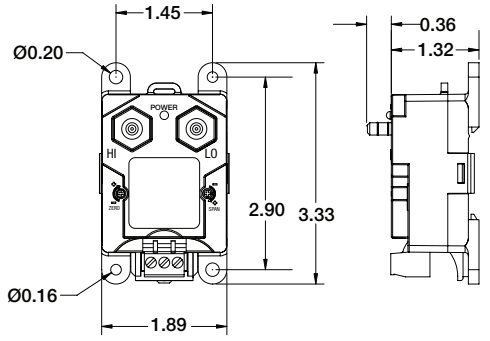
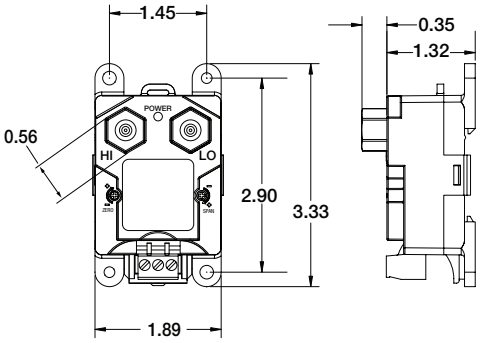
DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings.
All dimensions are identified in inches.

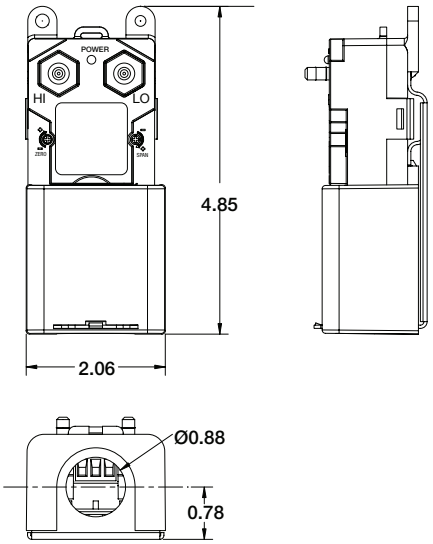
"MB2" ¼ BARBED FITTINGS



"F01" ⅛ NPT FEMALE FITTINGS



ASSEMBLED WITH 101A213-01 ½" PLENUM/CONDUIT KIT



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