ASHCROFT®
Trust the shield.®

CXLdp Differential Pressure Transmitter

FEATURES

- Rugged ABS package capable of DIN rail or panel mounting
- LED power status indicator
- Detachable Euro style terminal block
- More than 20 pressure ranges all capable of withstanding 1 bar
- 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

CXLdp
Pressure Transmitter

SPECIFICATIONS

Reference Temperature:	21 °C ±1 °C (70 °F ±2 °F)
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:	250 ms

ENVIRONMENTAL SPECIFICATIONS

Limits Temperature:	Storage:	-40 °C to 82 °C (–40 °F to 180 °F)
	Operating:	-17 °C to 71 °C (0 °F to 160 °F)
	Compensated:	2 °C to 54 °C (35 °F to 130 °F)
Thermal Coefficients:	Zero & Span: ±0,54 % of span /10 K From 21 °C (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

Pressure:	Max. Static (Line):	1,7 bar (25 psi)
	Proof:	1,0 bar (15 psid)
	Burst:	1,7 bar (25 psid)
Mounting Position Effect:	±1 % of span/g (Calibration in vertical position is standard)	

KEY BENEFITS

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

ELECTRICAL SPECIFICATIONS

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
Circuit Protection:	Reverse polarity and miswire protected	

PHYSICAL SPECIFICATIONS

Pressure Connections:	1/4 brass barbed fittings (male) 1/8 NPT Female brass
Electrical Connection:	Euro style pluggable terminal block accepts Ø 0,4 ... 2 mm gauge wire
Visual Indicator:	LED
Weight:	Approx. 0,07 kg
Mounting:	Threaded fastener and 35 mm DIN rail mount
Enclosure Rating:	NEMA 1 (IP20), Fire-retardant ABS (meets UL94-5VA)

ashcroft.eu
sales@ashcroft.com
+49 (0) 2401/808-0

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WETTED PARTS

Media:

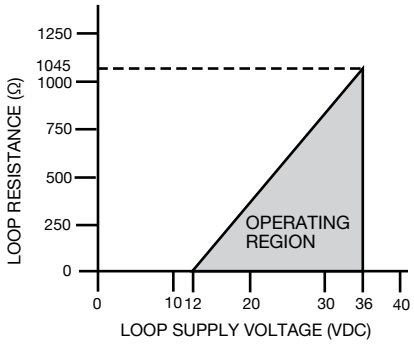
Clean, dry air/gases compatible with Aluminum, Titanium, PBT, Buna, Glass, Gold, Silicone Rubber, Silicon, Silicone RTV and Brass
NOT FOR USE ON LIQUIDS

NON-WETTED PARTS

Housing:

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

LOAD LIMITATIONS 4-20 mA OUTPUT ONLY

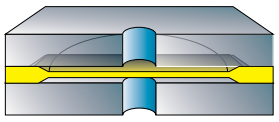


V_{min} = 12 V+ [0,022 A[1] * R_L]
[1] *Current includes a 10% safety factor*

$R_L = R_S + R_W$
R_L = Loop Resistance in Ω [Ohm]
R_S = Sense Resistance in Ω [Ohm]
R_W = Wire Resistance in Ω [Ohm]

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

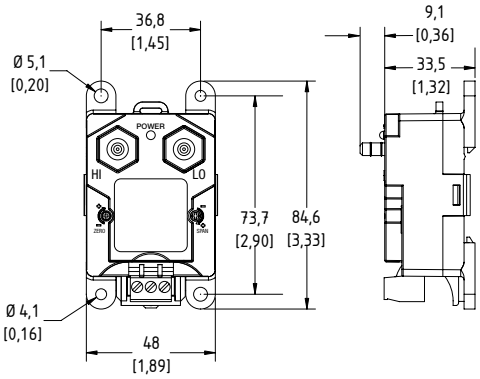


The silicon diaphragm sensor has no glues or other organics to contribute to drift or mechanical degradation over time.

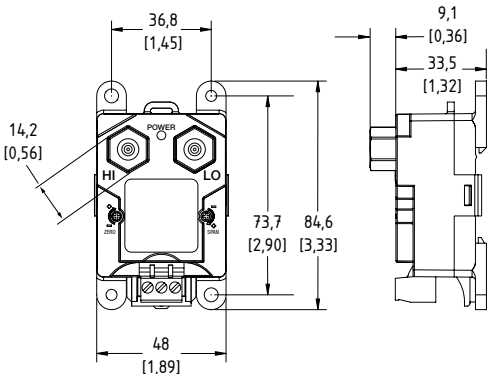
DIMENSIONS IN MM [INCH]

For reference only, consult Ashcroft for specific dimensional drawings

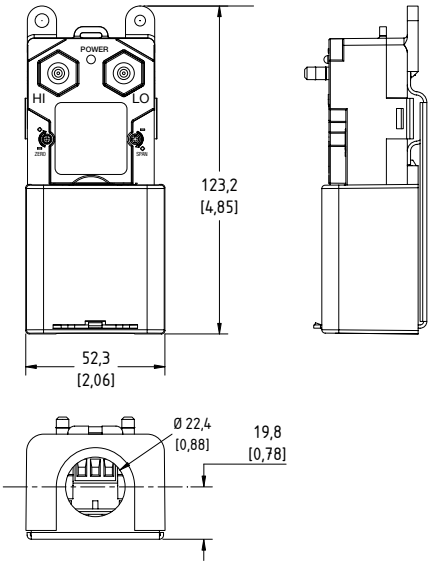
"MB2" ¼ BARBED FITTINGS



"F01" ⅛ NPT FEMALE FITTINGS



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



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PRESSURE RANGES							
Pascal Pa				Inch Water In.H20			
unidirectional		bidirectional		unidirectional		bidirectional	
Code	Range	Code	Range	Code	Range	Code	Range
25PA	25 Pa	25PAL	± 25 Pa	P1IW	0,10 "W.C.	P05IWL	± 0,05 "W.C.
50PA	50 Pa	50PAL	± 50 Pa	P2IW	0,20 "W.C.	P1IWL	± 0,10 "W.C.
60PA	60 Pa	60PAL	± 60 Pa	P25IW	0,25 "W.C.	P25IWL	± 0,25 "W.C.
100PA	100 Pa	100PAL	± 100 Pa	P4IW	0,40 "W.C.	P5IWL	± 0,50 "W.C.
125PA	125 Pa	125PAL	± 125 Pa	P5IW	0,50 "W.C.	1IWL	± 1,00 "W.C.
160PA	160 Pa	160PAL	± 160 Pa	P6IW	0,60 "W.C.	2IWL	± 2,00 "W.C.
200PA	200 Pa	200PAL	± 200 Pa	P75IW	0,75 "W.C.	2P5IWL	± 2,50 "W.C.
250PA	250 Pa	250PAL	± 250 Pa	1IW	1,00 "W.C.	3IWL	± 3,00 "W.C.
300PA	300 Pa	300PAL	± 300 Pa	2IW	2,00 "W.C.	5IWL	± 5,00 "W.C.
400PA	400 Pa	400PAL	± 400 Pa	2P5IW	2,50 "W.C.	10IWL	± 10,00 "W.C.
500PA	500 Pa	500PAL	± 500 Pa	3IW	3,00 "W.C.	15IWL	± 15,00 "W.C.
600PA	600 Pa	600PAL	± 600 Pa	5IW	5,00 "W.C.		
1KPA	1 kPa	1KPAL	± 1 kPa	10IW	10,00 "W.C.		
1P6KPA	1,6 kPa	1P25KPAL	± 1,25 kPa	15IW	15,00 "W.C.		
2KPA	2 kPa	1P6KPAL	± 1,6 kPa	20IW	20,00 "W.C.		
2P5KPA	2,5 kPa	2KPAL	± 2 kPa	25IW	25,00 "W.C.		
4KPA	4 kPa	2P5KPAL	± 2,5 kPa				
5KPA	5 kPa	4KPAL	± 4 kPa				
6KPA	6 kPa	5KPAL	± 5 kPa				

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ORDERING CODE	EXAMPLE:	CX4	MB2	42	250PA	XRH
Model						
CX3	CXLdp Series, Accuracy: ±0,25 % of span Thermal coefficient 0,54 % of span / 10 K					
CX4	CXLdp Series, Accuracy: ±0,40 % of span Thermal coefficient 0,54 % of span / 10 K	CX4				
CX8	CXLdp Series, Accuracy: ±0,80 % of span Thermal coefficient 0,54 % of span / 10 K					
Pressure Connection						
F01	1/8 NPT Female					
MB1	Board level only, no housing (consult factory)					
MB2	1/4 Barbed Male		MB2			
Output Signal						
10	0/10 VDC (includes user selectable 0-5 VDC output)					
42	4/20 mA			42		
Pressure Range (coding example only, see table “Pressure Ranges” at page 3)						
250PA	250 Pa (unidirectional)				250PA	
Options (If choosing an option(s) must include a “X”)						X__
Calibration						
3P	3-Point calibration					
CL	Transducer special calibration (Information is required by the customer)					
Case						
AH	Plenum/conduit kit packed with transmitter					
Marking/Tagging						
NH	Stainless steel tagging wired (Information is required by the customer)					
NN	Paper tagging (Information is required by the customer)					
Testing/Certificate						
CD2	Certificate according to EN 10204 2.2					
RH	NIST traceable 9-point calibration report (Standard for CX3)					RH

Ashcroft Instruments GmbH • sales@ashcroft.com • www.ashcroft.eu

Deutschland / Germany
Max-Planck-Str. 1
D-52499 Baesweiler
Tel.: +49 (0) 2401 808-0

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