

Low pressure differential transducer model CXLdp

Accuracy 0,4 % and 0,8 % F.S.

Features

- Rugged ABS package capable of DIN rail or standard panel mounting
- LED power status indicator to assist in trouble shooting or quickly locating the instrument in a duct
- Detachable DIN style terminal block reduces wiring errors and field wiring time
- 25 standard pressure ranges all capable of withstanding 1 bar without damage or calibration change
- Digitally compensated, 0,4 % F.S. and 0,8 % F.S. accuracy models
- NIST traceable



Ranges

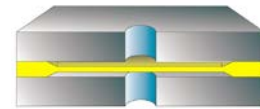
0 ... 25 Pa up to 0 ... 6 kPa dp
 $\pm 0/25$ Pa up to $\pm 0/5$ kPa dp

Applications

Low pressure measurement for building energy management and comfort control
 Flow measurement
 Filter monitoring

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

Sensor cross section

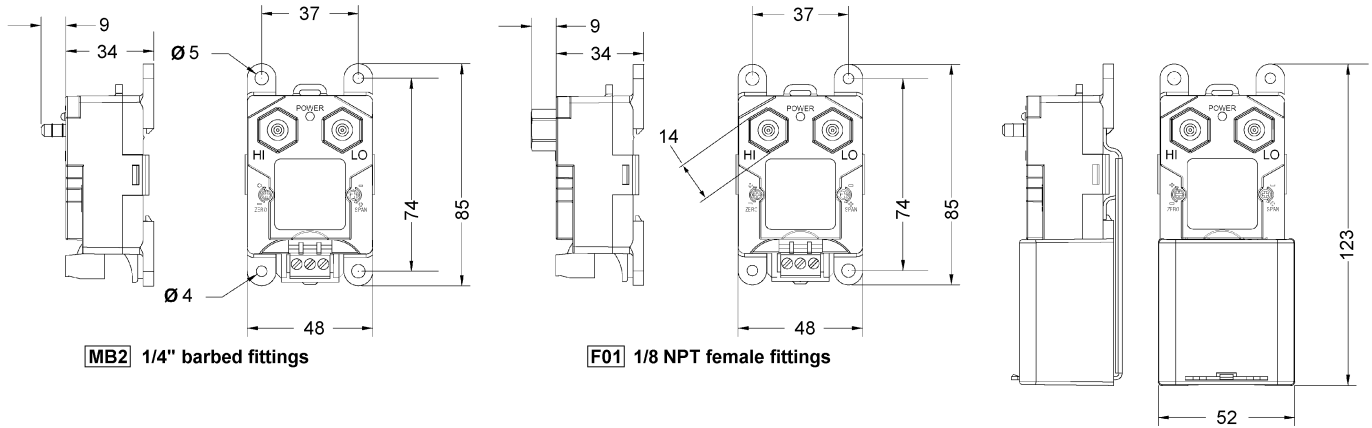


The silicon diaphragm sensor has no glues or other organics to contribute a drift or mechanical degradation over time.

Technical specification	CXLdp
Measuring principle	Differential Si-glass/aluminum capacitor with single crystal silicon diaphragm
Ranges unidirectional in Pa	25 60 100 160 250 400 600 1000 1600 2500 4000 6000
in in. W.C.	0,1 0,25 0,5 0,75 1 1,5 2 2,5 3 5 10 15 25
bidirectional in Pa	± 25 ± 60 ± 100 ± 160 ± 250 ± 400 ± 600 ± 1000 ± 1600 ± 2500 ± 4000 ± 5000
in in. W.C.	$\pm 0,05$ $\pm 0,1$ $\pm 0,25$ $\pm 0,5$ ± 1 ± 2 $\pm 2,5$ ± 3 ± 5 ± 10
Overpressure	
Proof pressure in bar	1,0
Burst pressure in bar	1,7
Static pressure in bar	1,7
Pressure type	Differential, gauge, vacuum and compound
Process connection	1/4" barbed fittings, 1/8 NPT female, according to ANSI/ASME B1.20.1
Medium	Clean and dry air, non conducting and non corrosive gases
Material	
Process connection	Brass
Sensor element	Silicon, aluminum, glass
Case	NEMA type 1 fire-retardant ABS (meets UL 94-5VA)
Power supply	12 ... 36 VDC for output signal 4-20 mA, 14 ... 36 VDC or 24 VAC (± 20 %) for VDC output, reverse polarity protected
Output signal	4-20 mA (2-wire), 0-10 VDC (3-wire) with user selectable 0-5 VDC option
Max loop resistance for 4-20 mA	$\leq (U_B - 12 \text{ V}) / 0,022 \text{ A}$
Supply current	Max. 20 mA for 4-20 mA output signal
Optical process diagnostics	LED visual indicator
Accuracy according to DIN 16 086	0,4 % or 0,8 % F.S. (terminal point, includes the effects of linearity, hysteresis and repeatability)
Long term stability	$\leq 0,5$ % F.S. / year
Response time (10 ... 90 %)	250 ms
Warm-up time	15 sec
Permissible	
Operation temperature	-18 ... 70 °C
Storage temperature	-40 ... 82 °C
Compensated temperature range	2 ... 54 °C (10 ... 90 % R.H. non condensing)
Temperature influence	$\pm 0,54$ % / 10 K (ref. 20 °C)
Mounting position error (zero adjustable)	≤ 1 % / g (calibration in vertical position is standard)
Adjustments	Zero ± 5 % F.S., Span ± 5 % F.S., externally accessible
CE-mark/EMC	EMC directive 2004/108/EC, IEC/EN 61326-1 Edition 1.0 Industrial, IEC/EN 61326-2-3 Edition 1.0 Annex BB Industrial
Electrical connection	Euro style pluggable terminal block accepts 12-26 gauge wire (0,128 up to 3,31 mm ²), optional 1/2" conduit/plenum mounting bracket, suitable for cable gland M20x1,5
Mounting	Threaded fastener for wall mounting or DIN rail types EN 50022, EN 50035 and 50045
Protection according EN 60 529/IEC 529	IP40, IP54 assembled with 1/2" conduit/plenum mounting bracket and cover kit
Weight in kg	0,07; complete with 1/2" conduit/plenum mounting bracket and cover kit 0,15

All specifications are subject to change without notice.

General dimensions in mm



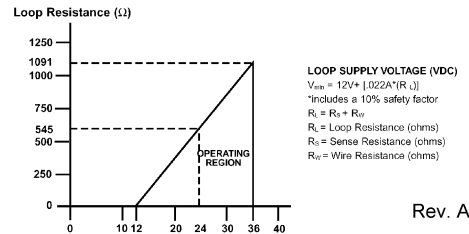
Standard DIN rail mount



Optional 1/2" plenum/conduit kit

Assembled with 1/2" conduit/plenum kit

Load Limitations 4-20mA Output



Rev. A

Order information

Type	Accuracy	Process connection	Output signal	Ranges		Options	
				in. W.C.	Pa and kPa		
(CX) CXLdp	(4) 0,4 %	(MB2) 1/4" barbed male	(42) 4-20 mA	Unidirectional (P1IW) 0/ 0,1 (P25IW) 0/ 0,25 (P5IW) 0/ 0,5 (P75IW) 0/ 0,75 (1IW) 0/ 1,0 (2IW) 0/ 2,0 (2P5IW) 0/ 2,5 (3IW) 0/ 3 (5IW) 0/ 5 (10IW) 0/ 10 (25IW) 0/ 25		Unidirectional (25PA) 0/ 25 Pa (60PA) 0/ 60 Pa (100PA) 0/ 100 Pa (160PA) 0/ 160 Pa (250PA) 0/ 250 Pa (400PA) 0/ 400 Pa (600PA) 0/ 600 Pa (1KPA) 0/ 1 kPa (1P6KPA) 0/ 1,6 kPa (2P5KPA) 0/ 2,5 kPa (4KPA) 0/ 4 kPa (6KPA) 0/ 6 kPa	(NH) Tagging wired (AH) 1/2" conduit/plenum mounting bracket and cover kit (delivered with transducer) (101A213-01) 1/2" conduit/plenum mounting bracket and cover kit (separately ordered) (CD4S) 3-point calibration certificate (RH) 9-point calibration certificate, traceable to a national standard
	(8) 0,8 %	(F01) 1/8 NPT female	(10) 0-10 VDC ¹⁾	Bidirectional (P1IWL) ±0,1 (P25IWL) ±0,25 (P5IWL) ±0,5 (1IWL) ±1 (2IWL) ±2 (5IWL) ±5 (10IWL) ±10 (15IWL) ±15			
				1) includes user selectable option 0-5 VDC output			

Order example

Type	Accuracy	Process connection	Output signal	Range	Options
CX	8	MB2	42	100PA	AH

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