

APPLICATIONS:

HVAC, fume hood control, lab/clean room pressurization, laminar flow, furnace/stack draft, leak detection, medical, fan tracking, filter monitoring, glovebox and velocity measurements

BENEFITS & FEATURES:

- **Certified 0.25% and 0.5% accuracy**
- **0.1"-200"-H₂O pressure ranges**
- **High overload protection**
- **FM approved for hazardous locations**
- **NEMA 4X metal construction**
- **Six types of output signals available**
- **Easy installation**
- **On-board voltage regulation allows use of lower cost, non-precise, unregulated power supply**

PERFORMANCE CHARACTERISTICS

Accuracy Class (F.S.): **0.25%** **0.50%**

Non-linearity		
Terminal point*	±0.2%	±0.4%
Best fit straight line (BFSL)	±0.15%	±0.3%
Hysteresis	±0.02%	±0.02%
Non-repeatability	±0.03%	±0.05%

*Includes Hysteresis

Stability – Max. Change (F.S./year): ±0.5 %

Standard Ranges (Inches W.C.)

Unidirectional Ranges:

Differential or Gauge			
0/0.1	0/2.0	0/10	0/50
0/0.25	0/2.5	0/15	0/100
0/0.50	0/3.0	0/20	0/150
0/1.0	0/5.0	0/25	0/200

Bidirectional Ranges:

Compound			
±0.05	±0.5	± 5.0	± 25.0
±0.10	±1.0	±10.0	± 50.0
±0.20	±2.0	±15.0	±100.0
±0.25	±2.5	±20.0	

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

Response Time: Standard: 250ms

(Consult factory for damping options)

Optional variable damping (0-30 sec) (X1D)

ENVIRONMENTAL CHARACTERISTICS

Temperature Limits:

Storage: -40 to 210°F

Operating: -20 to 185°F (0-95% relative humidity)

Compensated: 0 to 160°F

Thermal Coefficients:

	0.25% Acc.	0.5% Acc.
ZERO	±0.01%F.S./°F	±0.02%F.S./°F
SPAN	±0.01%F.S./°F	±0.02%F.S./°F

Vibration Sweep:

Less than 0.2%F.S./g temporary effect 10-130 Hz

FUNCTIONAL CHARACTERISTICS

Overpressure Limits:

Proof: 20 psid

Burst differential pressure: 50 psid

Maximum static (line) pressure: 100 psi

Static pressure effect: less than 0.5% F.S.

The Ashcroft® Industrial IXLdp was designed for the measurement and control of very low pressure and flow in industrial and process plant environments. The Industrial IXLdp transmitter features a rugged NEMA 4X enclosure, built-in electrical terminal box isolated from the electronics and threaded process connections.

The Ashcroft IXLdp transmitter utilizes a state-of-the-art variable capacitance sensor with a glass-clad silicon chip. The Si-Glas™ technology combines the inherent high sensitivity of a variable capacitance transducer with the repeatability of a micro-machined, single-crystal silicon diaphragm.

Mounting Position Effect:

1" W.C. and higher	0.1% F.S./g
0.25" up to 0.5" W.C.	0.5% F.S./g
0.1" W.C.	0.8% F.S./g

Note: Calibrated horizontally standard unless otherwise specified. Mounting Position Effect easily corrected with zero potentiometer.

ELECTRICAL SPECIFICATIONS

Output Signal:

Current: 4-20mA two wire current loop

Voltage: All voltage outputs are 3 wire
0-5 Vdc 1-6 Vdc ±5 Vdc
1-5 Vdc ±2.5 Vdc

Output Signal is Independent of Power Supply

Changes: 12-36 Vdc range without effect on output signal

Reverse Wiring Protected

Internal Zero and Span: ±10% F.S. Adjustment

Supply Current: 2.6mA typical for voltage output

Warm-up Time:

Full specification: Less than one second

Turndown & Variable Damping Optional

PHYSICAL CHARACTERISTICS

Enclosure:

NEMA 4X, 300 series stainless steel

TO ORDER THIS TYPE IXLdp TRANSDUCER/TRANSMITTER:

Select:

- Type Configuration (XLdp)** IX
- Accuracy/TC** (3)
(3) 0.25%, ±0.01%/°F (5) 0.50%, ±0.02%/°F
- Pressure Connection** (F02)
(F02) 1/4 NPT-Female
- Output Signal** (05)
(05) 0/5 Vdc (15) 1/5 Vdc (16) 1/6 Vdc (25) ±2.5 Vdc (50) ±5.0 Vdc (42) 4-20mA
- Electrical Terminal** (ST)
(ST) Screw Termination
- Pressure Range**
Diff. or Gauge: (P1IW) 0.10" W.C. (P25IW) 0.25" W.C. (P5IW) 0.50" W.C. (1IW) 1.00" 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. (15IW) 15.00" W.C. (20IW) 20.00" W.C. (25IW) 25.00" W.C. (50IW) 50.00" W.C. (100IW) 100.00" W.C. (150IW) 150.00" W.C. (200IW) 200.00" W.C.
Compound: (P05IWL) ±0.05" W.C. (P1IWL) ±0.10" W.C. (P2IWL) ±0.20" W.C. (P25IWL) ±0.25" W.C. (P5IWL) ±0.5" W.C. (1IWL) ±1.00" W.C. (2IWL) ±2.00" W.C. (2P5IWL) ±2.50" W.C. (3IWL) ±3.00" W.C. (5IWL) ±5.00" W.C. (10IWL) ±10.0" W.C. (15IWL) ±15.00" W.C. (20IWL) ±20.00" W.C. (25IWL) ±25.00" W.C. (50IWL) ±50.00" W.C. (100IWL) ±100.00" W.C.
- Optional X-Variation (XFM)** FM Approval Option (Includes all options in list)



The Si-Glas sensor is composed of sputtered metals and glass molecularly bonded to silicon. There are no epoxies or other organics in the sensor to contribute to drift or mechanical degradation over time.

Process Connections: Two 1/4 NPT female

Electrical Connections: Two 1/2" female electrical conduit connections isolated from the electronics.

Separate access cover for terminal connections
Media: Clean, dry and noncorrosive gas (consult factory for use on other media)
NOT FOR USE ON LIQUIDS

OPTIONS

- (X41) – 5:1 Turndown
- (X1D) – Variable damping (0-30 sec.)
- (XNH) – Paper tag
- (XCL) – Custom pressure range calibration
- (XFM) – FM approval

- Consult factory on other pressure range, temperature compensation, packaging variations or response times

Factory Mutual approvals intrinsically safe for use in:

Class I, Div. 1, Groups A, B, C, D

Class II, Div. 1, Groups E, F, G

Class III, Div. 1, when wired in accordance with Dresser drawings 71B241 (1-3)

FM option cannot be combined with options X41 or X1D.