

Model AXLdp Low Differential Pressure Transducer



SHOWN ACTUAL SIZE



The AXLdp is designed as a board mountable sensor with a compensated ratiometric output signal for OEM applications.

APPLICATIONS:

- Flow measurements
- Room pressure control
- Energy management
- Fan control

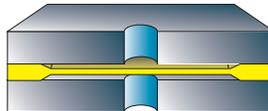
FEATURES:

- UL94-V0 rated PBT case
- Calibrated ratiometric output
- Low voltage power requirement
- Through holes allow for easy mounting to PCBs
- Available in pressure ranges below 0.5 inH₂O

The Ashcroft AXLdp transmitter uses the patented Si-Glas™ variable capacitance sensor technology. This MEMS sensor provides superior sensitivity, repeatability and long term stability when compared to other low pressure sensor technologies on the market. The Si-Glas™ sensor is used in conjunction with an Application Specific Integrated Circuit (ASIC) that allows for the digital compensation of the analog output signal. The compensation allows this low cost sensor to provide repeatable and accurate low pressure measurements.

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 to drift or mechanical degradation over time.

PERFORMANCE SPECIFICATIONS

Ref. Temperature: 70°F ± 2°F (21°C ± 1°C)

Accuracy

Class (Span): ±2.0%, ±1.0% optional.

Accuracy Includes: non-linearity, hysteresis, non-repeatability, zero offset and span setting errors.

Stability: Max. change (span/year) ±0.50% (inches of W.C.)

Pressure Ranges:

- Unidirectional:

0/0.20	0/1.00	0/5.00
0/0.25	0/2.00	0/10.0
0/0.50	0/2.50	0/15.00
0/0.75	0/4.00	0/20.00

- Bidirectional:

-0.10/+0.10	-1.00/+1.00	-5.00/+5.00
-0.25/+0.25	-2.00/+2.00	-7.50/+7.50
-0.50/+0.50	-2.50/+2.50	-10.00/+10.00

- Custom Calibration Ranges: Consult factory

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:

Storage: -40°F to 158°F (-40°C to 70°C)

Operating: -4°F to 140°F (-20°C to 60°C)

Compensated*: 37°F to 127°F (3°C to 53°C)

Humidity: 95% max non-condensing

Thermal Coefficients:

Zero: 0.10% Span/°F (0.18% Span/°C)

Span: 0.10% Span/°F (0.18% Span/°C)

FUNCTIONAL SPECIFICATIONS

Proof Pressure: 7.25 psi

Burst Pressure: 11.60 psi

Mounting Position: Vertical calibration

ELECTRICAL SPECIFICATIONS

Output Signal Ratiometric
(10% to 90% of the supplied voltage)
0.5 to 4.5 V with a 5Vdc supply

Supply Voltage: 4.75 to 5.25 Vdc

PHYSICAL SPECIFICATIONS

Pressure Conn: 3/32" I.D. tubing

Mating Electrical

Conn: JST BHR-03VS-1

Weight: 0.35 oz without leads

Protection Rating: IP20/NEMA type 1

Compatible Media: Clean, dry, non corrosive gas

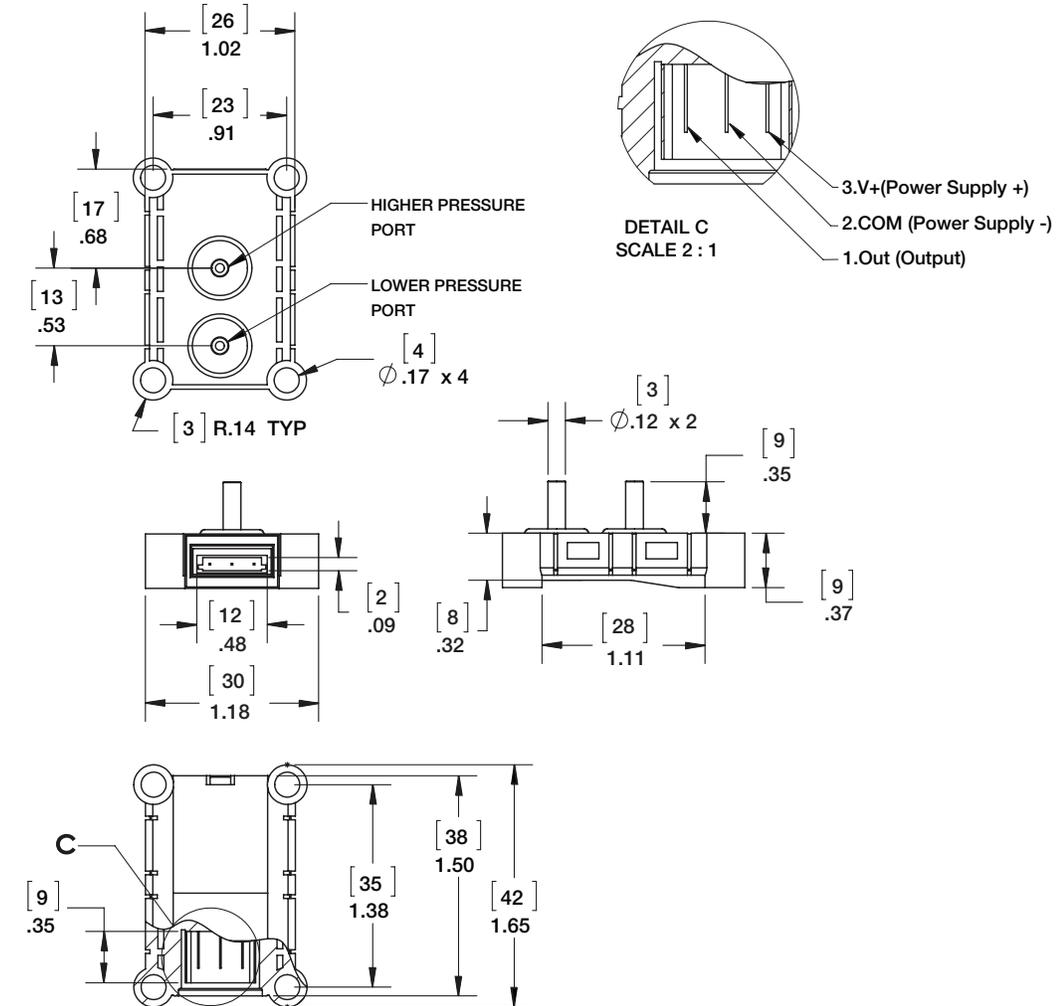
Wetted Material: Silicon, glass, gold, titanium, ceramic, silicone rubber, aluminum and PBT

RoHS Compliant

* Other temperature compensation ranges available, consult factory

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DIMENSIONS in inches and (metric):



HOW TO CONFIGURE

