

Model GL42 Low Differential Indicating Pressure Transmitter



TWO YEAR WARRANTY

FEATURES:

- **Excellent Long Term Stability**
- **Four Digit LCD Display**
- **Field-Selectable Units (i.w.c., pascal, millibar)**
- **4-20 mA Output (2-wire)**
- **IP65 Housing**
- **Wall, Panel or DIN Rail Mountable Versions**
- **Adjustable Display Response Time- 250msec, 1sec, 2sec or 5sec**
- **Optional NIST Traceable Calibration Chart**

APPLICATIONS:

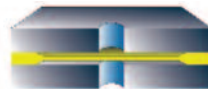
The GL42 model utilizes Ashcroft's proven Si-Glas™ silicon variable capacitance sensor technology, ideal for applications where reliable, low differential pressure measurement is required with pressure from $\pm 0.05''$ W.C. to 0 to 25.00'' W.C.

TYPICAL APPLICATIONS:

- **Filter monitoring**
- **Flow measurement**
- **Clean room monitoring**
- **Fume hoods**

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

PERFORMANCE SPECIFICATIONS

Reference condition: 77°F (25°C)

Accuracy*: $\pm 0.50\%$ or $\pm 1.00\%$ F.S. (URL)
 (* includes linearity, hysteresis and repeatability)

Repeatability: $\leq \pm 0.1\%$ F.S.

Stability: $\leq 0.5\%$ F.S. / Year

Zero / Span Adjustment: $\pm 5\%$ F.S.

Standard-Ranges (Unidirectional):

0.10'' to 25.00'' in H₂O

(See Pressure Range & Engineering Unit Table)

Standard-Ranges (Bidirectional):

$\pm 0.05''$ to $\pm 15.0''$ in H₂O

(See Pressure Range & Engineering Unit Table)

ENVIRONMENTAL SPECIFICATIONS

Enclosure Rating: IP65

Temperature Limits:

Operating: $-4/158^\circ\text{F}$ ($-20/70^\circ\text{C}$)

Storage: $-40/194^\circ\text{F}$ ($-40/90^\circ\text{C}$)

Compensated: $35/129^\circ\text{F}$ ($2/54^\circ\text{C}$)

(10-90% R.H. non-condensing)

Temperature Coefficients:

Zero & Span

$\pm 0.06\%$ / K within $35/129^\circ\text{F}$ ($2/54^\circ\text{C}$)

Ref. 77°F (25°C)

FUNCTIONAL SPECIFICATIONS

Static (line) Pressure: All Pressure Ranges

Proof: 14.5 psi (1 bar)

Burst: 24.65 psi (1.7 bar)

Max. Static: 24.65 psi (1.7 bar)

ELECTRICAL SPECIFICATIONS

LCD Display: 4 Digit

LCD Screen Dimensions:

Width: 1.77'' (45mm) / Height: 0.75'' (19mm)

LCD Character Size:

Height: 0.21'' (5.4mm) / Width: 0.45'' (11.5mm)

Output Signal: 4-20 mA (2 wire)

Supply Voltage: 19-36 Vdc (Nominal 24 Vdc)

Rangeability / Adjustment: Zero: $\pm 33\%$ F.S.

CE-Compliance: EN 61000-4-2, EN 61000-4-3

MECHANICAL SPECIFICATIONS

1/8'' Female NPT or 1/4'' Male Barbed Fitting

Electrical Connection:

1/2'' Female DIN Cable Conduit (Standard)

PG9 Cable Gland (Option)

Enclosure: Nylon

Cable Connection Socket: Nylon

Front Foil: Polyester

Electrical Connection: Screw Terminal

Weight: 9.9 oz (308 g)

Mounting: Wall Mount (Standard)

DIN Rail (Option):

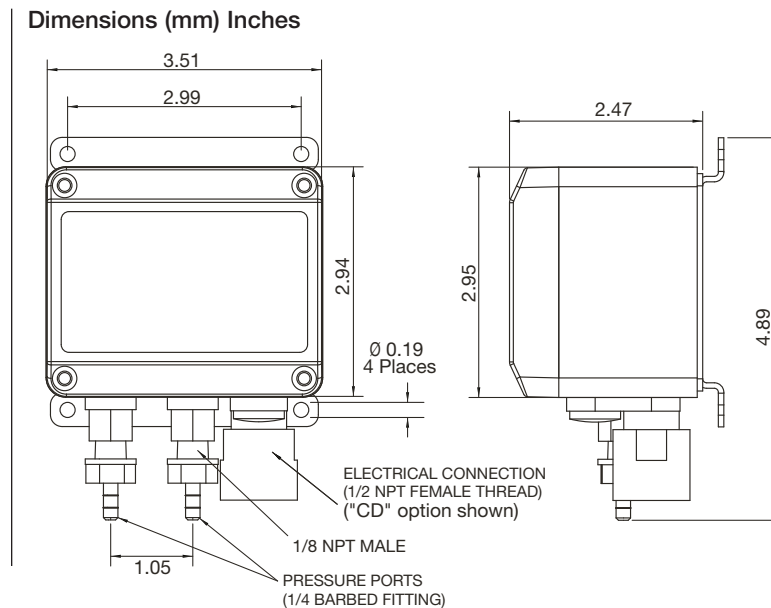
EN 50022 / EN 50035 / EN 50045

Panel Mount (Option)

Sensor Material: Silicon / Aluminum / Glass

Media: Clean, Dry Air / Non-Corrosive Gas

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TYPE	ACCURACY	PROCESS CONNECTION	OUTPUT SIGNAL	ELECTRICAL TERMINATION	MOUNTING	PRESSURE RANGE & ENGINEERING UNIT		OPTIONS
						INCHES OF H ₂ O	Pa/kPa	
GL42	(5) 0.5%	(F01) ½ Female NPT	(42) 4/20mA	(CD) ½ NPT Female Conduit	(W) Wall	Unidirectional (P1IW) 0.10 (P25IW) 0.25 (P5IW) 0.50 (P75IW) 0.75 (1IW) 1.00 (2IW) 2.00 (2P5IW) 2.50 (3IW) 3.00 (5IW) 5.00 (10IW) 10.00 (15IW) 15.00 (25IW) 25.00	Unidirectional (25PA) 25.00 (50PA) 50.00 (60PA) 60.00 (100PA) 100.00 (125PA) 125.00 (160PA) 160.00 (200PA) 200.00 (250PA) 250.00 (300PA) 300.00 (400PA) 400.00 (500PA) 500.00 (600PA) 600.00 (1KPA) 1.00 (1P6KPA) 1.60 (2KPA) 2.00 (2P5KPA) 2.50 (4KPA) 4.00 (5KPA) 5.00 (6KPA) 6.00	(NH) Stainless Steel Tag with Customer Supplied Information
	(7) 1.00%	(MB2) ¾ Male Barbed Fitting		(CG) Cable Gland	(D) DIN-Rail	Bidirectional (P05IWL) ±0.05 (P1IWL) ±0.10 (P25IWL) ±0.25 (P5IWL) ±0.50 (P75IWL) ±0.75 (1IWL) ±1.00 (2IWL) ±2.00 (5IWL) ±5.00 (10IWL) ±10.00 (15IWL) ±15.00	Bidirectional (25PAL) ±25.00 (50PAL) ±50.00 (60PAL) ±60.00 (100PAL) ±100.00 (125PAL) ±125.00 (160PAL) ±160.00 (200PAL) ±200.00 (250PAL) ±250.00 (300PAL) ±300.00 (400PAL) ±400.00 (500PAL) ±500.00 (600PAL) ±600.00 (1KPL) ±1.00 (1P6KPL) ±1.60 (2KPL) ±2.00 (2P5KPL) ±2.50 (4KPL) ±4.00 (5KPL) ±5.00 (6KPL) ±6.00	(HK) Panel Mount (Note: Only provided when ordered with 'W' wall mount version) (RH) 9-Point NIST Traceable Calibration Certificate

HOW TO ORDER

TYPE	ACCURACY	PROCESS CONNECTION	OUTPUT SIGNAL	ELECTRICAL TERMINATION	MOUNTING	PRESSURE RANGE	OPTIONS
GL42	5	MB2	42	CD	W	25IW -	XRH

All specifications are subject to change without notice.
All sales subject to standard terms and conditions.
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