

Model GC52 Rangeable Wet/Wet Differential Pressure Transmitter



ACTUAL SIZE



FEATURES:

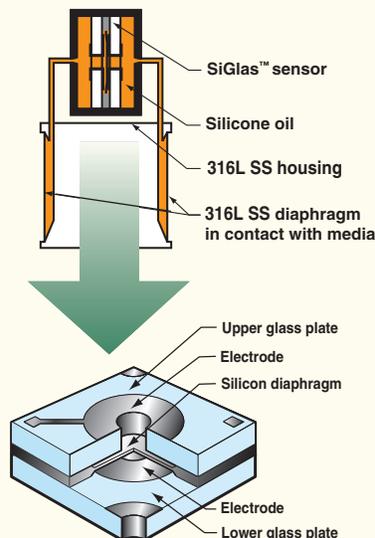
- Up to 8 times smaller than a conventional process transmitter
- Robust NEMA 4X (IP65) aluminum die cast housing
- Bright backlit LCD display
- 2 Wire 4-20mA
- Internal "Push Button" configurability allows quick range changes
- Scaling function allows display to indicate arbitrary physical units
- Flow measurement and totalization (square root extraction)
- Easily rotatable display, 90° increments
- Key lock

APPLICATIONS:

The GC52 utilizes Ashcrofts' proven Si-Glas™ silicon variable capacitance sensor technology in a wet-wet package ideal for applications where reliable, low differential pressure measurement is required with line (static) pressure to 300 psi. In addition the GC52 provides a linear flow output and (totalization) via square root extraction. Applications include;

- Pressurized & non-pressurized tank levels
- Flow (liquid/gas) measurement

SENSOR ASSEMBLY CROSS SECTION



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

- High overpressure
- Inherent long term stability
- High sensitivity for low pressure sensing

PERFORMANCE SPECIFICATIONS

Reference Condition: 23°C ±2° (73°F)

Accuracy: ±0.50% FS (URL)

(Accuracy includes the effects of linearity, hysteresis, and repeatability)

Stability: ±0.25% FS/year

Response Time: 100msec

Output Resolution: 0.1% FS (URL)

Display:

Type: 4 digit, 10mm LCD with LED backlight

Accuracy: ± 0.5% FS (URL) + last digit

Standard Ranges (Bi-Directional, Inches W.C.):

±4, ±8, ±20, ±40, ±80, ±200

Standard Ranges (Uni-Directional, Inches W.C.):

0-4, 8, 20, 40, 80, 200, 400

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:

Storage: -15 to 65°C (5 to 150°F)

Operating: -10 to 60°C (14 to 140°F)

Compensated: -10 to 60°C (14 to 140°F)

Temperature Effects (-10 to 60°C):

±0.03% FS/°C (from reference, 23°C (73°F))

FUNCTIONAL SPECIFICATIONS

Static (Line) Pressure:

Pressure Range	Proof	Burst
All	300 psi	800 psi

Static (Line) Pressure Effects:

Pressure Range	Effect
≥ 20" W.C., ±8" W.C.	±0.3% FS/100psi
8" W.C., ±4" W.C.	±0.7% FS/100psi
4" W.C.	±1.5% FS/100psi

Single Side (Differential) Limits:

Pressure Range	Proof	Burst
≤ 8" W.C., ±4" W.C.	30 psid	130 psid
≥ 20" W.C., ±8" W.C.	100 psid	130 psid

Vibration: 5g's 150Hz

Shock: 10g's 16ms

ELECTRICAL SPECIFICATIONS

Output Signal: 4-20mA (2 Wire)

Supply Voltage: 12-32Vdc

Rangeability / Adjustment*:

Zero -10% to +110% FS

Span -10% to +110% FS

*Note: Accuracy and output resolution based upon full scale (URL) value

Insulation Resistance: 50Vdc (>100Mohms)

CE Compliance: EMC Directive 2004/108/EC

• IEC/EN 61326-1: 2006 (EMI Class A/ EMS Table 2)

• IEC/EN 61326-2-3: 2006 (Annex BB (Pressure Transducer))

MECHANICAL SPECIFICATIONS

Pressure Connection:

- ¼ Female NPT (Std.)

- 54mm conversion joint for 3-way manifold (Opt.)

Enclosure: Aluminum, epoxy coated

Rating: IP65 / NEMA 4X

Electrical Connection:

External Options:

- ½ Female NPT Conduit

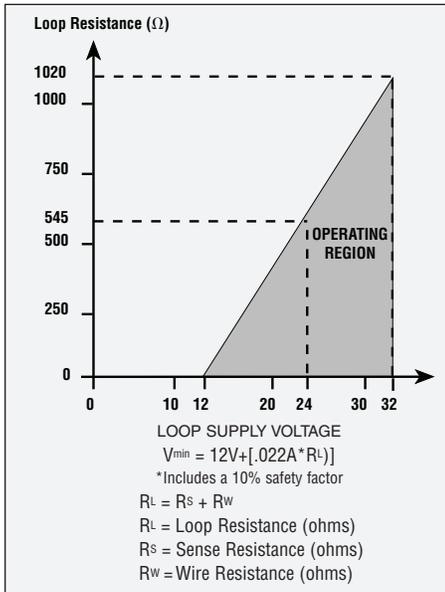
- Cable Gland (Cable Diameters 0.35" to 0.47")

Weight: Approx. 1.0 lb

Mounting: Mounting Bracket (see installation drawings on back)

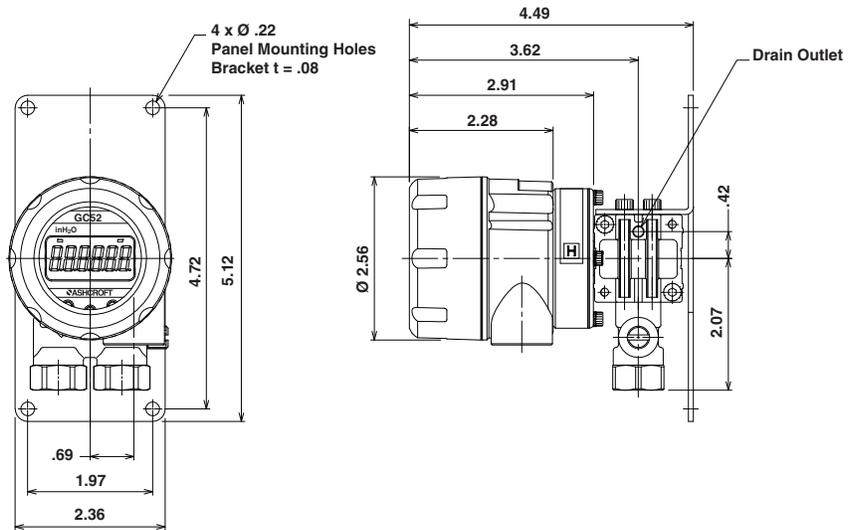
Media: Fluids and gases compatible with 316SS, Viton and Alumina Ceramic

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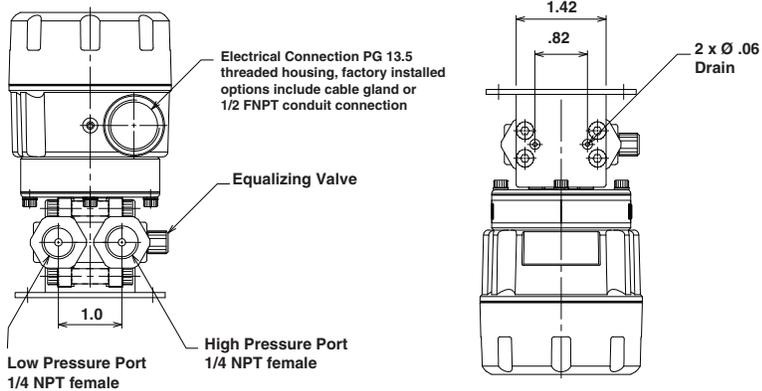
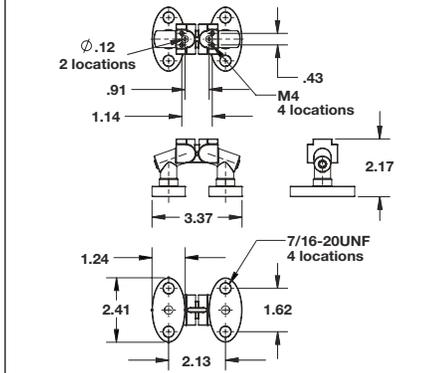


Dimension Drawings

Dimensions in inches



54mm Conversion Joint Body
 Part Number 141A444-01



How To Order

GC52	7						X
Type Configuration (GC52)	Accuracy (7) ±0.50% FS	Pressure Fitting (F02) 1/4 FNPT	Output Signal (42) = 4-20mA	Electrical Connection (CG) = Cable Gland (CD) = 1/2" FNPT Conduit	Pressure Range (Compound/Bidirectional)		Optional X-Variations XRH 9 pt. NIST traceable calibration certificate
					4IWL = ±4" W.C. 8IWL = ±8" W.C. 20IWL = ±20" W.C. 40IWL = ±40" W.C. 80IWL = ±80" W.C. 200IWL = ±200" W.C.		
					Pressure Range (Differential/Gauge)		
					4IW = 0-4" W.C. 8IW = 0-8" W.C. 20IW = 0-20" W.C. 40IW = 0-40" W.C. 80IW = 0-80" W.C. 200IW = 0-200" W.C. 400IW = 0-400" W.C.		