Model GC52 Rangeable Wet/Wet Differential Pressure Transmitter

ACTUAL SIZE

LOOK FOR THIS AGENCY MARK ON OUR PRODUCTS

FEATURES:

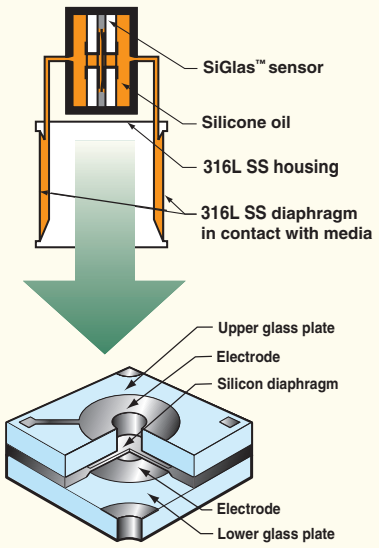
- *Up to 8 times smaller than a conventional process transmitter*
- *Robust NEMA 4X (IP65) aluminum die cast housing*
- *Bright backlit LCD display*
- *2 Wire 4-20mA*
- *Internal "Push Button" configurability allows quick range changes*
- *Scaling function allows display to indicate arbitrary physical 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

Rangeablility / 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: EN 613261 1997, A1/1998, A2/2001 (Heavy Industrial)

MECHANICAL SPECIFICATIONS

Pressure Connection: ¼ Female NPT

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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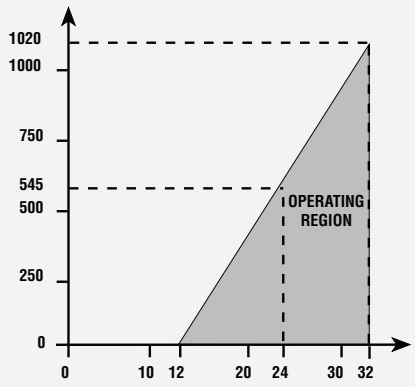
Load Limitations 4-20mA Output Only



$V_{min} = 12V+[.022A*R_L)]$

*Includes a 10% safety factor

$R_L = R_S + R_W$

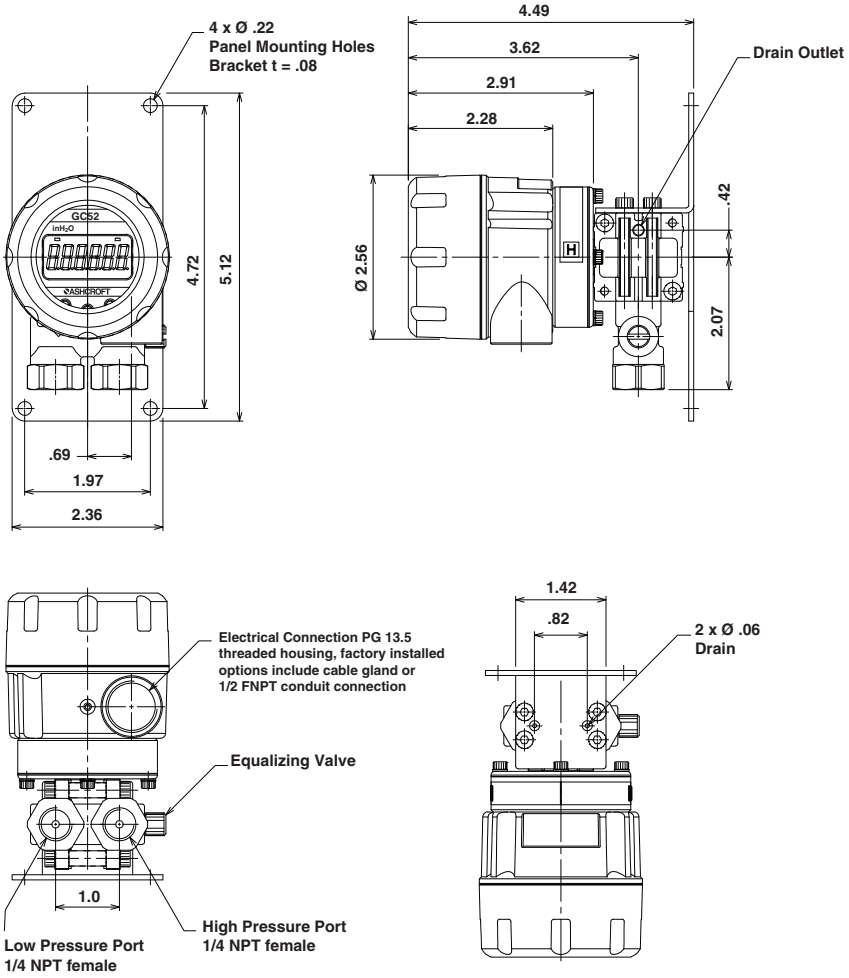
R_L = Loop Resistance (ohms)

R_S = Sense Resistance (ohms)

R_W = Wire Resistance (ohms)

Dimension Drawings

Dimensions in inches



How To Order

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Type Configuration (GC52)	**Accuracy (7)**±0.50% FS	**Pressure Fitting (F02)** ¼ FNPT	**Output Signal (42)**= 4-20mA	**Electrical Connection (CG)** = Cable Gland **(CD)** = ½˝ FNPT Conduit	**Pressure Range (Compound/Bidirectional)** **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.	**Optional X-Variations** **XRH** 9 pt. NIST traceable calibration certificate

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