

## Model GC52 Rangeable Wet/Wet Differential Pressure Transmitter



ACTUAL SIZE



LOOK FOR THIS AGENCY MARK ON OUR PRODUCTS

### FEATURES:

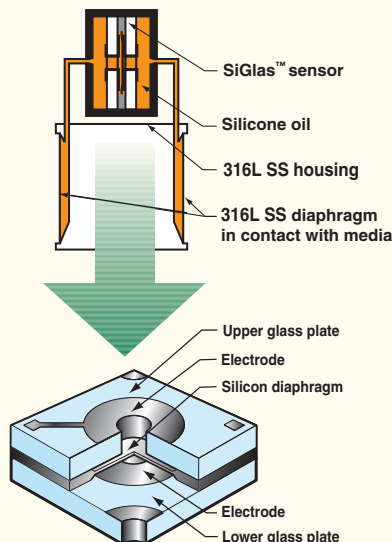
- Up to 8 times smaller than a conventional process transmitter
- Robust NEMA 4X (IP65) aluminum die cast housing
- Bright backlit LCD display
- All stainless steel wetted parts
- 2 Wire 4-20mA
- Internal "Push Button" configurability allows quick range changes
- Scaling function allows display to indicate arbitrary physical units
- Easily rotatable display, 90° increments

### 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.

- 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)

**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	1000 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:** EN 613261 1997, A1/1998, A2/2001 (Heavy Industrial)

### MECHANICAL SPECIFICATIONS

**Pressure Connection:** ½ Female NPT

**Enclosure:** Aluminum

**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

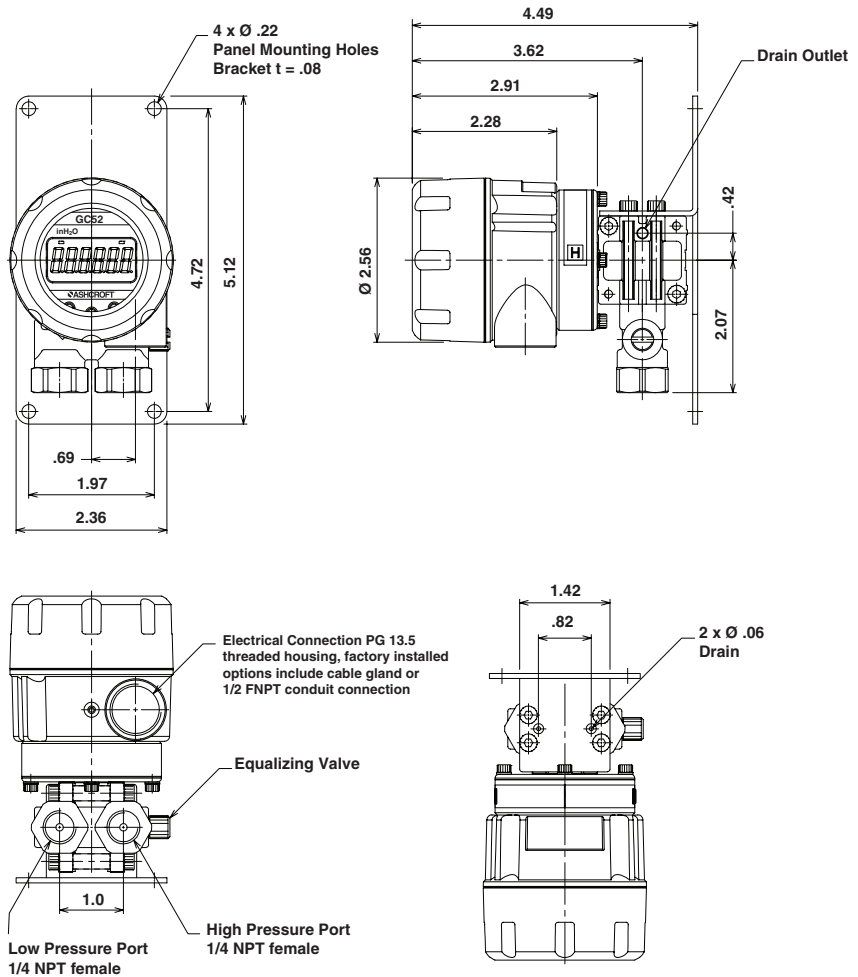
**Mounting:** Mounting Bracket (see installation drawings on back)

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

## Model GC52 Rangeable Pressure Transmitter

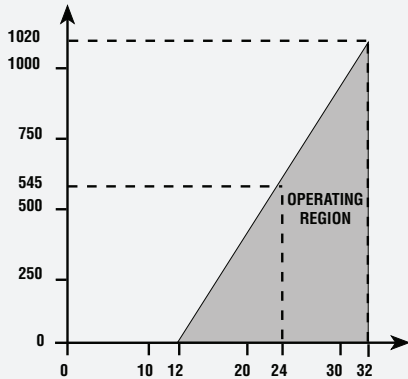
### Dimension Drawings

Dimensions in inches



### Load Limitations 4-20mA Output Only

Loop Resistance (Ω)



LOOP SUPPLY VOLTAGE

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

\*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)

### How To Order

<b>GC52</b>	<b>7</b>						<b>X</b>
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
					4IWL = ±4" W.C. 8IWL = ±8" W.C. 20IWL = ±20" W.C. 40IWL = ±40" W.C. 80IWL = ±80" W.C. 200IWL = ±200" W.C.	9 pt. NIST traceable calibration certificate	
					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.		