

Data Sheet

GC52 Differential Pressure Transducer

FEATURES

- Bright backlit 4-digit LCD display
- Scaling function allows display to indicate user defined physical units
- Internal “push-button” configurability allows quick range changes
- “Loop Check” function allows unit to output 4-20 mA without applying pressure
- Linear flow output and totalization via square root extraction

TYPICAL USES

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



PERFORMANCE SPECIFICATIONS

Reference Temperature:	73°F (23°C)
Accuracy:	±0.50% of span (URL) Includes the effects of linearity, hysteresis, and repeatability
Stability:	±0.25% of span (URL)/year
Output Resolution:	0.1% of span (URL)
Model:	4 digit, 10mm LCD with LED backlight

ENVIRONMENTAL SPECIFICATIONS

Temperature Effects:	(-10°C to 60°C) ±0.03% FS/C°
Temperature Limits:	Storage: 5°F to 150°F (-15°C to 65°C) Operating: 14°F to 140°F (-10°C to 60°C) Compensated: 14°F to 140°F (-10°C to 60°C)

FUNCTIONAL SPECIFICATIONS

Static (Line) Pressure

Pressure Range:	Proof:	Burst:
4 IWC to ≤400 IWC	300 psi	800 psi

Single Side (Differential)

Pressure Range:	Proof:	Burst:
≤8 IWC, ±4 IWC	30 psid	130 psid
≥20 IWC, ±8 IWC	100 psid	130 psid

Static (Line) Pressure Effects

Pressure Range:	Effect:
≥20 IWC, ±8 IWC	±0.3% Range/100 psi (URL)
8 IWC, ±4 IWC	±0.7% Range/100 psi (URL)
4 IWC	±1.5% Range/100 psi (URL)

Response Time: 100ms (user adjustable)

Vibration: 5g's 150Hz

Shock Effect: 10g's 16ms

GC52
Pressure Transducer



KEY BENEFITS

- Up to 8X smaller than a conventional process transmitter
- Compact robust design
- Easily rotatable display, 90° increments
- Robust NEMA 4X (IP66) aluminum die cast housing

ELECTRICAL SPECIFICATIONS

Output Signal:	4-20 mA (2 Wire)
Supply Voltage:	12-32 Vdc
Rangeability/ Adjustment:	Zero -10% to 110% Span Span -10% to 110% Span (Accuracy and output resolution based upon full scale (URL) value)
Insulation Resistance:	50 Vdc (>100 MΩ)
EMC 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))

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PHYSICAL SPECIFICATIONS

Weight:	Approx. 1.0 lb.
Environmental Rating:	IP66/NEMA 4X
Mounting:	Mounting bracket included
Pressure Connection:	¼ NPT Female
Electrical Connection (External):	½ NPT Female Conduit Cable Gland (Cable diameters 0.35" to 0.47")

WETTED MATERIAL

Diaphragm	Process Connection	Media Compatibility
316 SS, Viton® & Alumina Ceramic	316 SS	Fluids and gases compatible with 316 SS, Viton® and Alumina Ceramic

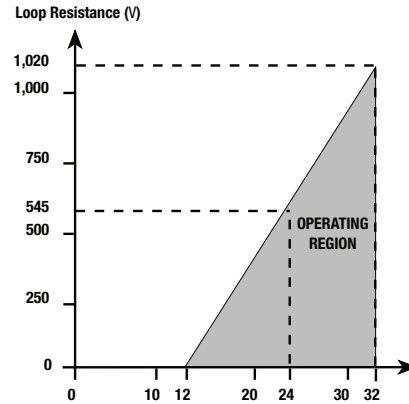
NON-WETTED

Enclosure
Aluminum, epoxy coated

OPTIONAL FEATURES

Calibration Report:	9 point NIST traceable calibration report
Pressure Connection:	54mm conversion joint for 3-way manifold

LOAD LIMITATIONS 4-20 mA OUTPUT ONLY



LOOP SUPPLY VOLTAGE

$$V_{min} = 12V + [0.022A \cdot R_L]$$

*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)

ORDERING CODE

Example:

GC52 7 F02 42 CG 4IWL -XRH

Model

GC52 - Rangeable wet/wet differential pressure transmitter

GC52

Accuracy

7 - ±0.50% of span

7

Pressure Fitting

F02 - ¼ NPT Female

F02

Output Signal

42 - 4-20 mA Output signal

42

Electrical Connection

CG - Cable gland

CG

CD - ½ NPT Female conduit

Pressure Range

Bidirectional

4IWL - ±4 IWC

4IWL

8IWL - ±8 IWC

20IWL - ±20 IWC

40IWL - ±40 IWC

80IWL - ±80 IWC

200IWL - ±200 IWC

Differential

4IW - 0-4 IWD

8IW - 0-8 IWD

20IW - 0-20 IWD

40IW - 0-40 IWD

80IW - 0-80 IWD

200IW - 0-200 IWD

400IW - 0-400 IWD

Option (if including an option(s) must include an "X")

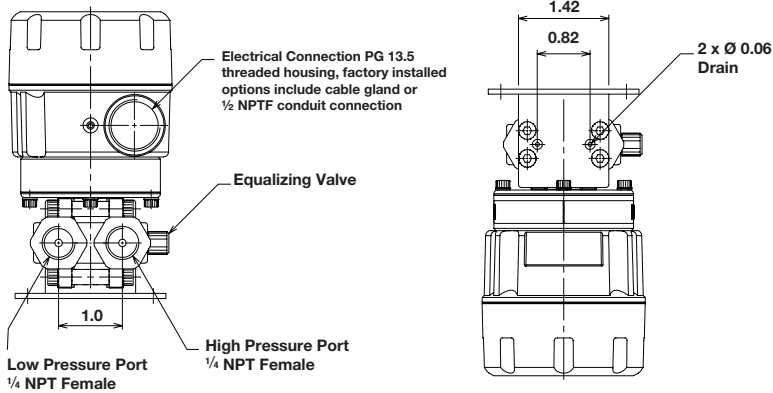
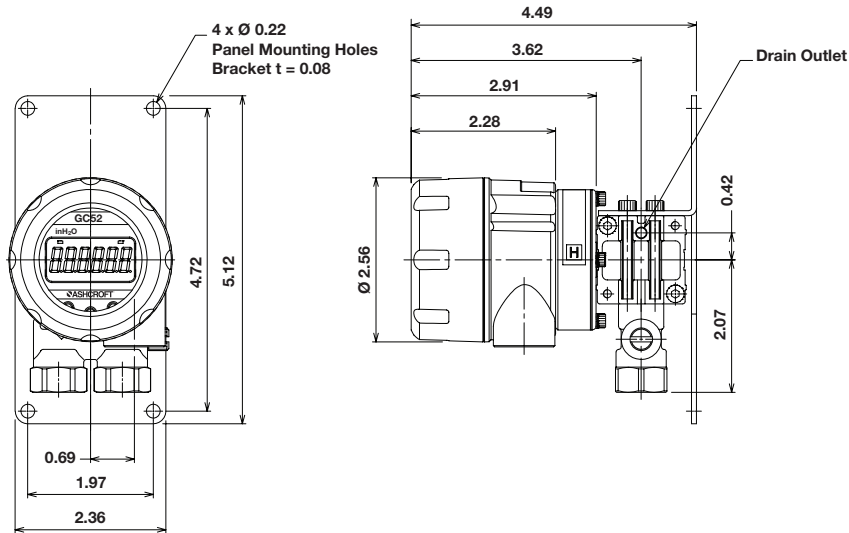
RH - 9 pt. NIST traceable calibration certificate

X
RH

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DIMENSIONS



**54mm Conversion Joint Body
Part Number 141A444-01**

