ASHCROFT®
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GC51 Pressure Transmitter

FEATURES

- Bright backlit 4-digit LCD display
- "Loop Check" function allows unit to output 4-20 mA without applying pressure
- Internal "push-button" configurability allows quick range changes
- "Min./Max. Hold" function allows display to capture pressure events
- Easily rotatable display, 90° increments

TYPICAL USES

- Pump control
- Hydraulic systems
- Compressor control
- Process automation
- Municipal water tank level

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PERFORMANCE SPECIFICATIONS

Reference Temperature:	73 °F (23 °C)
Accuracy:	±0.25% of span (All ranges through 7500 psi) ±0.5% of span (9.00 and 15.00 ksi ranges) ±1.0% of span (20.00 ksi range) (includes effects of linearity, hysteresis & repeatability)
Stability:	±0.25% of span upper range limit (URL)/year
Output Resolution:	0.1% of span (URL)

ENVIRONMENTAL SPECIFICATIONS

Temperature Effects:	14 °F to 140 °F (–10 °C to 60 °C) ±0.02% of span (URL)/°C
Temperature Limits:	Storage: –4 °F to 158 °F (–20 °C to 70 °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

Overpressure:	Proof:	Burst:
≤1,500 psi	2 X Range	5 X Range
3,000 & 5,000 psi	1.5 X Range	3 X Range
7,500 psi thru 20 ksi	1.2 X Range	3 X Range

Response Time:	30 ms (user adjustable)
Vibration:	5 g's 150 Hz
Shock Effect:	10 g's 16 ms
Display:	4 digit, 10 mm LCD with LED backlight Accuracy: ± 0.25% of span (URL) + last digit

ELECTRICAL SPECIFICATIONS

Output Signal:	4-20 mA (2 Wire)
Supply Voltage:	12-32 Vdc
Rangeablility/ Adjustment:	Zero: -10% to +110% span Span: -10% to +110% span (Accuracy and output resolution based upon the span (URL) value)

KEY BENEFITS

- **Robust NEMA 4 (IP66) aluminum die cast housing**
- **Scaling function allows display to indicate user defined physical units**
- **Up to 8X smaller than a conventional process transmitter**

ELECTRICAL SPECIFICATIONS (Continued)

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))

PHYSICAL SPECIFICATIONS

Process Connection:	All ranges through 9.00 ksi: ¼ NPT Female Ranges15.00 ksi and 20.00 ksi: 9/16-18 UNF-2B for ¼″ O.D. High Pressure Tubing
Weight:	Approx. 1.0 lb.
Environmental Rating:	IP66/NEMA 4
Electrical Connection:	½ NPT Female Conduit Cable Gland (Cable diameters 0.35″ to 0.47″)

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PHYSICAL SPECIFICATIONS (Continued)

Mounting: Mounting bracket included

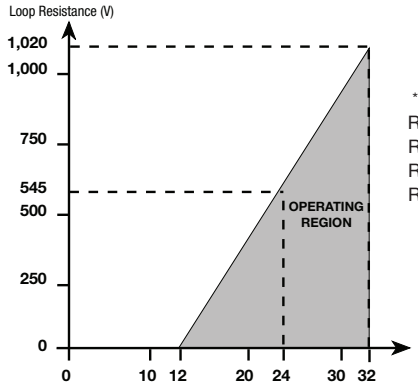
WETTED MATERIAL

Diaphragm	Process Connection	Media Compatibility
17-4 PH® SS	316 Stainless steel	Fluids and gases compatible with 316 Stainless steel and 17-4 PH® Stainless steel

NON-WETTED

Enclosure
Aluminum, epoxy coated

LOAD LIMITATIONS 4-20 mA OUTPUT ONLY



LOOP SUPPLY VOLTAGE

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

*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)

ORDERING CODE

Example:	GC51	7	F02	42	CG	15#&VACG	– XRH
Model							
GC51 - Rangeable pressure transmitter	GC51						
Accuracy							
7 - ±0.25% of span on ranges through 7,500 psi ±0.5% of span on 9.00 & 15.00 ksi ranges ±1.0% of span on 20.00 ksi range		7					
Pressure Fitting							
F02 - ¼ NPT Female (select for all ranges through 9.00 ksi)			F02				
F09 - 9/16-18 UNF-2B for ¼" O.D. High Pressure Tubing (select for 15.00 and 20.00 ksi ranges)							
Output Signal							
42 - 4-20 mA Output signal				42			
Electrical Connection							
CG - Cable gland					CG		
CD - ½ NPT Female conduit							
Pressure Range							
Vacuum							
0#&VACG - -14.7 to 0 psi							
Compound							
N3&3#G -3 to 3 psi							
N7.5&7.5#G -7.5 to 7.5 psi							
15#&VACG - -14.7 to 15 psi						15#&VACG	
30#&VACG - -14.7 to 30 psi							
50#&VACG - -14.7 to 50 psi							
Gauge							
5#G - 0 to 5 psi							
7.5#G - 0 to 7.5 psi							
15#G - 0 to 15 psi							
30#G - 0 to 30 psi							
50#G - 0 to 50 psi							
100#G - 0 to 100 psi							
150#G - 0 to 150 psi							
300#G - 0 to 300 psi							
500#G - 0 to 500 psi							
1000#G - 0 to 1,000 psi							
1500#G - 0 to 1,500 psi							
3000#G - 0 to 3,000 psi							
5000#G - 0 to 5,000 psi							
7500#G - 0 to 7,500 psi							
9000#G - 0 to 9.00 ksi, Note 1 (accuracy is ±0.5% of span)							
15000#G - 0 to 15.00 ksi, Note 1 (accuracy is ±0.5% of span)							
20000#G - 0 to 20.00 ksi, Note 1 (accuracy is ±1.0% of span)							
Absolute							
20#A - 0 to 20 psia							
Option (if including an option(s) must include an "X")							X__
C4 - Traceable 9 point calibration certificate for digital display only							
RH - Traceable 9 point calibration certificate for 4-20 mA output only							RH
6B - Cleaned for oxygen service							
NH - Stainless steel tag with customer supplied information							

Note: Due to 4 digit display and internal count/resolution limitation, multiply the displayed value x 1000 to determine the psi value.

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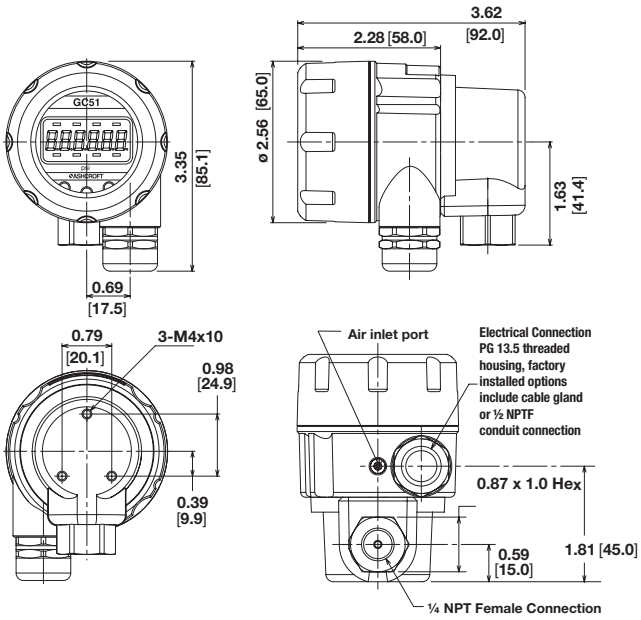
DIMENSIONS are in inches and [millimeters]

For reference only, consult Ashcroft for specific dimensional drawings



Installation Drawings