

## Data Sheet

# GC31 Ultra-Compact Digital Transducer

### FEATURES

- Combination of digital pressure gauge, switch and transducer
- Simple “push-button” configurability allows user to adjust switch settings and analog scaling
- Numerous standard ranges available

### TYPICAL USES

- Hydraulic presses
- Stamping equipment
- Lifts
- Tire press vulcanization
- Pressure monitoring
- Water, refrigerant or ammonia based cooling systems
- Pressure monitoring on lubrication systems

### PERFORMANCE SPECIFICATIONS

Reference Temperature: 73 °F (23 °C)

**Analog Output:** 1-5 Vdc

Accuracy: ±1.0% of span  
Accuracy includes linearity, hysteresis and repeatability (URL)

Response Time: 50 ms

Output Resolution: 25 mV

Analog Scaling: User may configure analog output scaling to any range within F.S. of sensor range

#### Pressure Switch Output:

Type: NPN or PNP open collector up to 30 Vdc/80 mA

Setting Accuracy: ±1.0% of span (URL)

Number of Contacts: 2

Time Delay: 5 ms-2 sec (selectable)

Hysteresis: Variable deadband (by user)

Switch Setting: User may adjust switch actuation and dead-band to any points within F.S. sensor range

#### Display:

Type: 3½ digit, 10 mm LED

Accuracy: ±1.0% of span + last digit (URL)

Display Setting: User may re-configure display scaling, set to capture MIN or MAX value, and adjust display update rate

CE Compliance: EN61326-1 2006, EN61326-2-3 2006

### ENVIRONMENTAL SPECIFICATIONS

Temperature Effects: (ref. 73°F (23°C)) Zero/Span: ±0.03% span/F (±0.05% F.S./C)

Temperature Limits:	Storage: -22 °F to 140 °F (-30 °C to 60 °C)
	Operating: -4 °F to 140 °F (-20 °C to 60 °C)
	Compensated: 14 °F to 122 °F (-10 °C to 50 °C)

Humidity: 0-85% RH, Non-condensing



**GC31**  
Pressure Transducer



### KEY BENEFITS

- Ultra-compact indicating transducer with analog scaling and switch options
- Field-proven thin film sensor
- Monitors a wide variety of applications

### FUNCTIONAL SPECIFICATIONS

Overpressure:	Proof:	Burst:
<500 psi	2 X Range (URL)	8 X Range (URL)
>1,000 psi	1.5 X Range (URL)	8 X Range (URL)

### ELECTRICAL SPECIFICATIONS

#### Power Supply Requirements:

Supply Voltage: 11-27 Vdc

Current Consumption: 30 mA (Max.)

Switch Contacts: (2) NPN or PNP open collector outputs

NPN: 30 Vdc / 80 mA (Max.)

PNP: Voltage drop 1 Vdc (Max.) / 80 mA (Max.)

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### PHYSICAL SPECIFICATIONS

Pressure Connection:	¼ NPT Male
Environmental Rating:	IP40
Weight:	Approx. 110 grams
Mounting:	Panel mounting bracket included (Back connect only)
Electrical Connection Size:	6' cable pigtail

### OPTIONAL FEATURES

Calibration Report: [Traceable calibration certificate](#)

### WETTED MATERIAL

Diaphragm	Process Connection	Media Compatibility
17-4PH SS	304 SS	Fluids and gases compatible with 316 SS (sensor housing) and 17-4PH SS (sensor diaphragm)

### NON-WETTED

Enclosure
ABS, polycarbonate, aluminum



Featuring highly reliable CVD thin film pressure sensing technology

ORDERING CODE	Example:	GC31	7	M02B	1N	F4	15#&V	- XRH
<b>Model</b>								
GC31 - Ultra-compact digital pressure sensor		GC31						
<b>Accuracy</b>								
7 - ±1.0% of span			7					
<b>Pressure Fitting</b>								
M02L - ¼ NPT Male w/ lower connect								
M02B - ¼ NPT Male w/ back connect				M02B				
<b>Output Signal</b>								
1N - 1-5 Vdc: Analog w/2X NPN Type switches					1N			
1P - 1-5 Vdc: Analog w/2X PNP Type switches								
<b>Electrical Connection</b>								
F4 - 6' (2m) cable						F4		
<b>Pressure Range</b>								
<b>Compound</b>								
15#&V - Vac-15 psig							15#&V	
75#&V - Vac-75 psig								
150#&V - Vac-150 psig								
300#&V - Vac-300 psig								
<b>Gauge</b>								
50#G - 0-50 psig								
100#G - 0-100 psig								
150#G - 0-150 psig								
300#G - 0-300 psig								
500#G - 0-500 psig								
1000#G - 0-1,000 psig								
1500#G - 0-1,500 psig								
<b>Option (if including an option(s) must include an "X")</b>								X
RH - <a href="#">Traceable calibration certificate</a>								RH

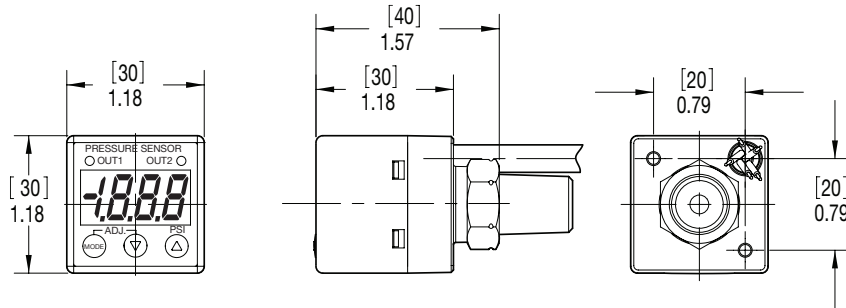
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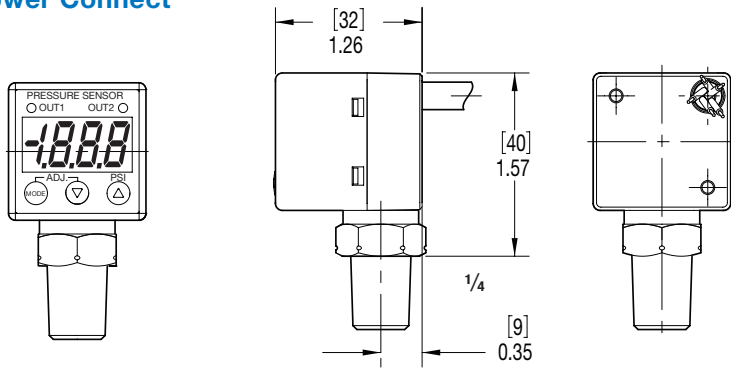
### DIMENSIONS in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

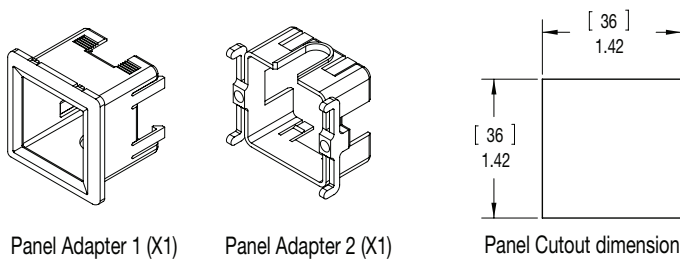
#### Back Connect



#### Lower Connect



#### Panel Mounting Kit (back connection only)



#### Notes:

Back connect version (M02B/MG2B) to be supplied with panel mount adapter in box