

Model GC31 Ultra-Compact Digital Pressure Sensor



GC31 LOWER
CONNECT

GC31 BACK
CONNECT

ACTUAL SIZE



FEATURES:

- Ultra-compact design (30 mm x 30 mm)
- Combined three-in-one digital pressure gauge, switch and transducer
- Simple "Push-Button" configurability allows user to adjust switch settings, analog scaling
- Numerous standard ranges available

APPLICATIONS:

- Hydraulic presses, stamping equipment, lifts
- Tire press vulcanization, pressure monitoring
- Water, refrigerant or ammonia based cooling systems
- Pressure monitoring on lubrication systems



PRODUCT SPECIFICATIONS

Analog Output (1-5 VDC):

Accuracy: $\pm 1,0$ % F.S. (accuracy includes effects of linearity, hysteresis and repeatability)

Response time: 50 ms

Output resolution: 25 mV

Analog scaling: User may configure analog output scaling to any range within full scale of sensor range

Pressure Switch Output:

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

Setting Accuracy: $\pm 1,0$ % F.S.

Number of contacts: 2

Time delay: 5 ms – 2,0 s (by user)

Hysteresis: Variable (by user)

Switch setting: User may adjust switch actuation and deadband to any points within full scale sensor range

Display:

Type: 3 ½ digit, 10 mm LED

Accuracy: $\pm 1,0$ % F.S. \pm last digit

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

Metric Ranges in MPa:

1 2 3,5 5 10 20 35 50

Metric Compound Ranges in MPa:

-0,1/1 -0,1/2

Standard Ranges (Gauge) in psi:

50 100 150 300 500 1000 1500

Standard Ranges (Compound) in psi:

-15/15 -15/75 -15/150 -15/300

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:

Storage: -30 to 60 °C (-22 to 140 °F)

Operating: -20 to 60 °C (-4 to 140 °F)

Compensated: -10 to 50 °C (14 to 122 °F)

Temperature Effects:

Zero/Span: (from 23 °C (73 °F) reference temperature)

$\pm 0,05$ % / K ($\pm 0,03$ % / °F)

Humidity: 0-85 % RH (Non-Condensing)

FUNCTIONAL SPECIFICATIONS

Proof pressure:

200 % for ranges \leq 3,5 MPa (500 psi)

150 % for ranges \geq 5 MPa (1000 psi)

Burst pressure: 800 % F.S.

CE Compliance:

EN 61326-1 2006, EN 61326-2-3 2006

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 Type: 30 VDC/80 mA (max.)

PNP Type: voltage drop 1 VDC (max) / 80 mA (max.)

MECHANICAL SPECIFICATIONS

Pressure Connection:

G ¼ B male according EN 837-1, ¼ NPT male according ANSI/ASME B1.20.1/EN 837-1

Enclosure: ABS, polycarbonate, aluminum

Rating: IP40

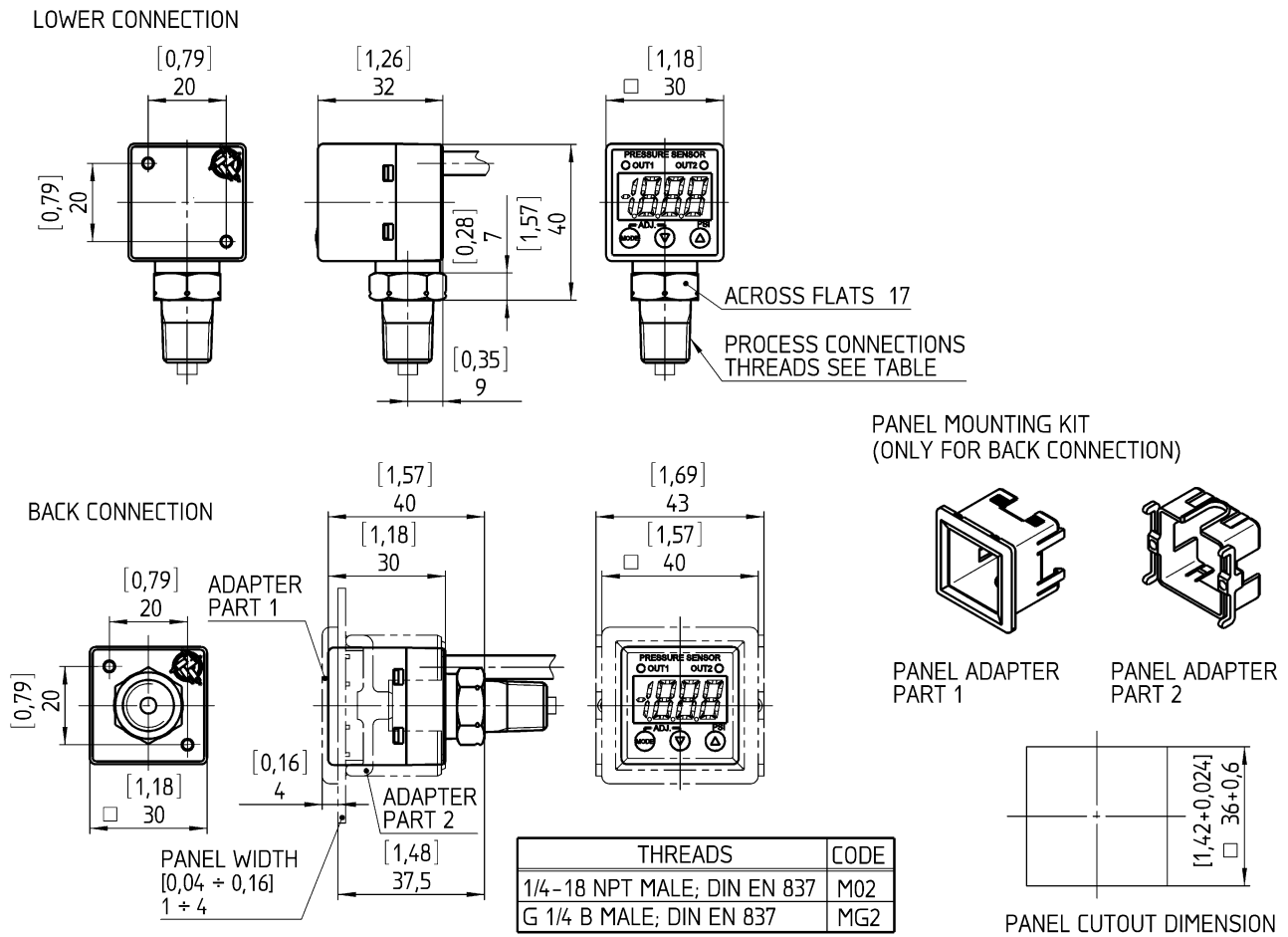
Electrical Connection: 2 m (6 ft) cable pigtail

Weight: Approx. 110 g

Mounting: Panel mounting bracket included (back connect only)

Media: Fluids and gases compatible with stainless steel 304 (1.4301) (sensor housing) and stainless steel 17-4 pH (1.4542/1.4548) (sensor diaphragm)

General dimensions in mm [inch]



Order information

Type	Accuracy	Process connection	Output signal	Electrical connection	Range	Eng. unit	Options	
GC31	(7) 1,0 %	(M02L) ¼ NPT male, lower connect	(1N) 1-5 VDC analog w/2x NPN type switches	(F4) 2 m (6') cable	Compound:		(NH) Tagging wired	
					15#&V	-15/15		psi
					75#&V	-15/75		
					150#&V	-15/150		
					300#&V	-15/300		
		1MP&V	-0,1/1		MPa			
		2MP&V	-0,1/2					
		Gauge:				psi		
		50#G	50					
		100#G	100					
150#G	150							
300#G	300							
500#G	500							
1000#G	1000							
1500#G	1500							
1MPG	1	MPa						
2MPG	2							
3.5MPG	3,5							
5MPG	5							
10MPG	10							
20MPG	20							
35MPG	35							
50MPG	50							
		(M02B) ¼ NPT male, back connect	(1P) 1-5 VDC analog w/2x PNP type switches				(RH) 9 point NIST traceable calibration certificate	
		(MG2L) G ¼ B male, lower connect						
		(MG2B) G ¼ B male, back connect						

Order example

Type	Accuracy	Process connection	Output signal	Electrical connection	Range	Engineering unit	Options
GC31	7	MG2L	1P	F4	1	MPG	RH

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