Model GC30 Ultra-Compact Digital Differential Pressure Sensor

GC30

GC30 WITH INSTALLED PANEL ADAPTOR

ACTUAL SIZE

LOOK FOR THIS AGENCY MARK ON OUR PRODUCTS

APPLICATIONS:
- *Filter monitoring*
- *Clean room pressure differential*
- *Vacuum/suction pressure sensing & control*
- *Fan speed control*

FEATURES:
- *Ultra-compact design 1.2˝ x 1.2˝ (30mm x 30mm)*
- *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*

Featuring a highly reliable variable capacitance sensor using the patented Ashcroft® SiGlas™ sensor. This ultra-thin single crystal diaphragm provides inherent sensor repeatability and stability.

SENSOR CROSS SECTION
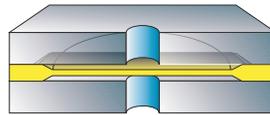
The silicon diaphragm sensor has no glues or other organics to contribute to drift or mechanical degradation over time.

PRODUCT SPECIFICATIONS

Analog Output (1-5Vdc):
Accuracy: ± 1.5% FS (accuracy includes effects of linearity, hysteresis and repeatability)
Response time: 50msec
Output resolution: 25mV
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 30Vdc/80ma
Setting Accuacy: ± 1.5% F.S.
Number of contacts: 2
Time delay: 5 msec –2.0 sec (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: 3½ digit, 10mm LED
Accuracy: ±1.5% FS + last digit
Display setting: User may re-configure display scaling, set to capture MIN or MAX value, and adjust display update rate.

Inches of Water Column (˝ W.C.) Ranges:

Standard Ranges (Gauge):
0 to 0.25˝ W.C., 0.50˝ W.C., 1.0˝ W.C., 2.5˝ W.C., 5.0˝ W.C., 10˝ W.C., 25˝ W.C.

Standard Ranges (Compound):
±0.25˝ W.C., ±0.50˝ W.C., ±1.0˝ W.C., ±2.5˝ W.C., ±5.0˝ W.C., ±10˝ W.C., ±25˝ W.C.

ENVIRONMENTAL SPECIFICATIONS

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

Temperature Effects:
Zero/Span: (from 73°F/23°C reference temperature)
±0.09%/°F (±0.15%/°C) ±2.5˝ W.C., 0/2.5˝ W.C. and below
±0.06%/°F (±0.10%/°C) ±5.0˝ W.C., 0/5.0˝ W.C. and above

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

FUNCTIONAL SPECIFICATIONS
Proof pressure: 7.5psid (50kPa)
Burst pressure: 25psig (170kPa)
Max static (line) pressure: 7.5psi (50kPa)
CE Compliance: EN61326-1 2006, EN61326-2-3 2006

ELECTRICAL SPECIFICATIONS

Power Supply Requirements:
Supply voltage: 11-27Vdc
Current consumption: 30mA (max)

Switch Contacts:
(2) NPN or PNP open collector outputs
NPN Type: 30Vdc / 80mA (max)
PNP Type: voltage drop 1Vdc (max)/80mA (max)

MECHANICAL SPECIFICATIONS

Pressure Connection: 4mm barb
Enclosure: ABS, polycarbonate, aluminum
Rating: IP40
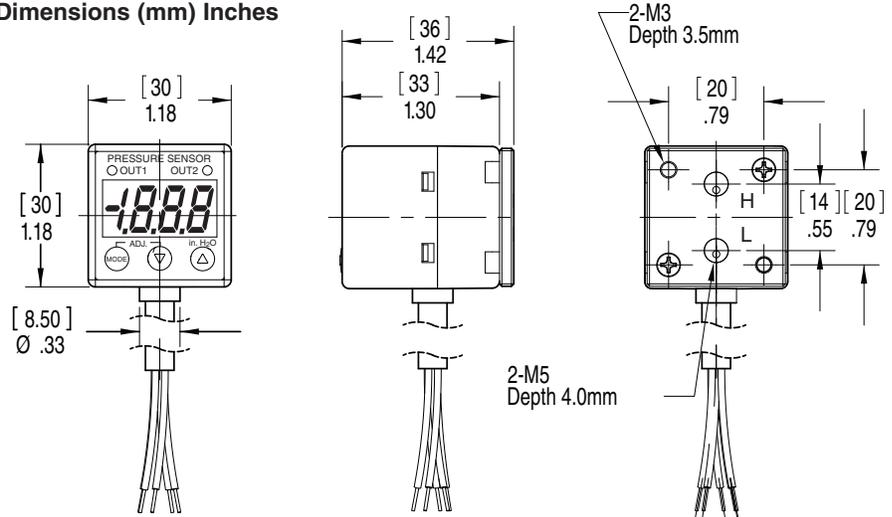**Electrical Connection:** 6ft (2m) cable pigtail
Weight: Approx. 75 grams
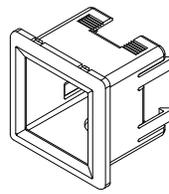**Mounting:** Panel mounting bracket included
Media: Clean, dry air/gases compatible with Aluminum, ABS, Ceramic, Silicon, and Silicone RTV

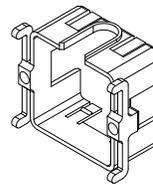# Model GC30 Ultra-Compact Digital Differential Pressure Sensor
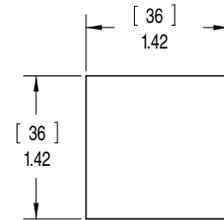
Dimensions (mm) Inches

2-M3
Depth 3.5mm

[30] 1.18
[30] 1.18

[36] 1.42
[33] 1.30

[20] .79
[14] .55
[20] .79
H
L

PRESSURE SENSOR
OUT1   OUT2
-188.8
ADJ.   in. H₂O
MODE

[8.50] Ø .33

2-M5
Depth 4.0mm

Panel Mounting Kit (included)

Panel adapter 1 (X1)

Panel adapter 2 (X1)

[36] 1.42
[36] 1.42

Panel cutout dimension

Barb Dimensions

[7].28   Hex

[7].28
[14].55

[4].16

M5x0.8

4mm Barb (x 2)
(suitable for 4mm (0.156˝) I.D. tubing)
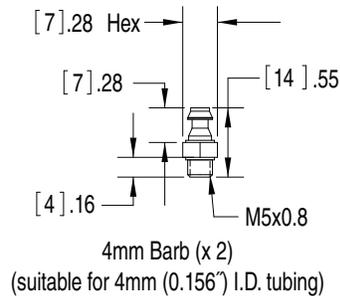
Notes:

1. Unit to be shipped with panel mount adaptor in box
2. Unit to be supplied with 4mm fittings in box

How to order

G C 3 0	9	M 5 B	☐☐☐	F 4	☐☐☐☐☐☐ —	X ☐☐

Accuracy
(9) ±1.5%

Connection
(M5B) 4mm ID Barb

Output Signal
(1N) 1-5Vdc: Analog w/2X
      NPN Type switches
(1P) 1-5Vdc: Analog w/2X
      PNP Type switches

Electrical Connection
(F4) 6 (2m) cable

Type
(GC30)

Pressure Range

Diff. or Gauge:		Compound:	
(P25IW)	0.25˝W.C.	(P25IWL)	±0.25˝W.C.
(P5IW)	0.50˝W.C.	(P5IWL)	±0.50˝W.C.
(1IW)	1.0˝W.C.	(1IWL)	±1.0˝W.C.
(2P5IW)	2.5˝W.C.	(2IWL)	±2.5˝W.C.
(5IW)	5.0˝W.C.	(5IWL)	±5.0˝W.C.
(10IW)	10˝W.C.	(10IWL)	±10˝W.C.
(25IW)	25˝W.C.	(25IWL)	±25˝W.C.

Options
XRH
Traceable 9 Point
Calibration Report