

Model GC30 Ultra-Compact Digital Differential Pressure Sensor



GC30



ACTUAL SIZE



APPLICATIONS:

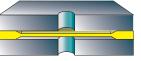
- Filter monitoring
- Clean room pressure differential
- Vacuum/suction pressure sensing & control
- Fan speed control

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: \pm 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/80maSetting Accuacy: $\pm 1.5\%$ 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 & 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

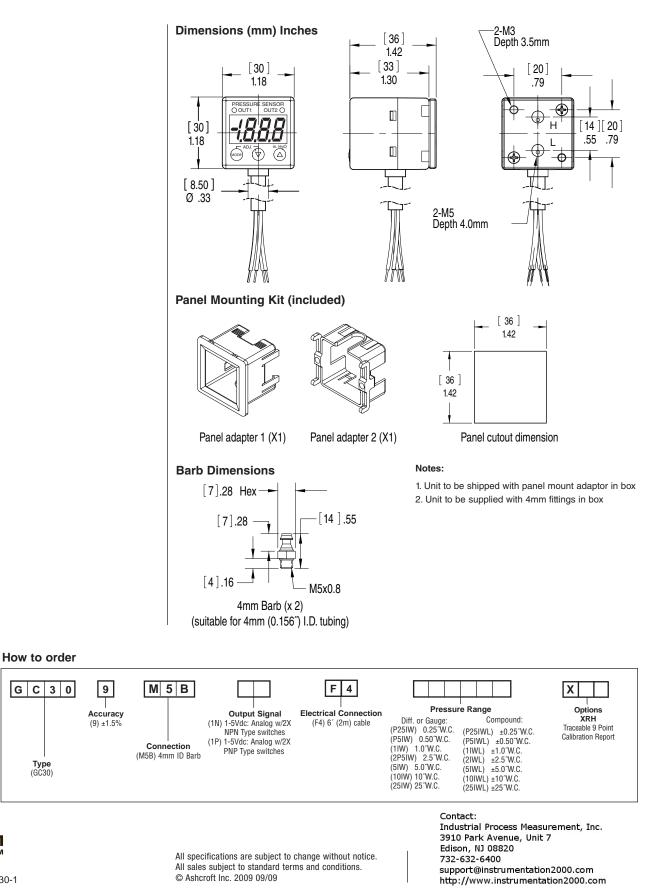
Mounting: Panel mounting bracket included Media: Clean, dry air/gases compatible with Aluminum, ABS, Ceramic, Silicon, and Silicone RTV



All specifications are subject to change without notice. All sales subject to standard terms and conditions. © Ashcroft Inc. 2009 09/09



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ISO 9001

REGISTERED FIRM

Type (GC30)