

Model GC30

Ultra-Compact Digital Differential Pressure Sensor



ACTUAL SIZE



FEATURES:

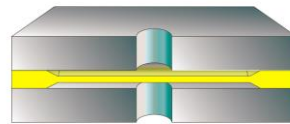
- Ultra-compact design (30 mm x 30 mm)
- Combined three-in-one digital pressure gauge, switch and transducer
- Simple "Push-Button" configurability allows user to adjust switch settings, analog scaling
- Numerous standard ranges available

APPLICATIONS:

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

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 (1-5 VDC):

Accuracy: ±1,5 % 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: ±1,5 % 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: ±1,5 % F.S. ± 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 Pa: 50 100 200 500

in kPa: 1 2 5

Metric Compound Ranges:

in Pa: ±50 ±100 ±200 ±500

in kPa: ±1 ±2 ±5

Inches of Water Column Ranges in "W.C.:

0,25 0,5 1 2,5 5 10 25

Inches of Water Column Compound Ranges in "W.C.:

±0,25 ±0,5 ±1 ±2,5 ±5 ±10 ±25

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)

±0,15 % / K (±0,09 % / °F) for 500 Pa, ±500 Pa

(±2,5" W.C., 0/2,5" W.C.) and below

±0,10 % / K (±0,06 % / °F) for 1 kPa, ±1 kPa

(±5,0" W.C., 0/5,0" W.C.) and above

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

FUNCTIONAL SPECIFICATIONS

Proof pressure: 50 kPa (7,5 psid)

Burst pressure: 170 kPa (25 psig)

Max. static (line) pressure: 50 kPa (7,5 psi)

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: 4 mm barb

Enclosure: ABS, polycarbonate, aluminum

Rating: IP40

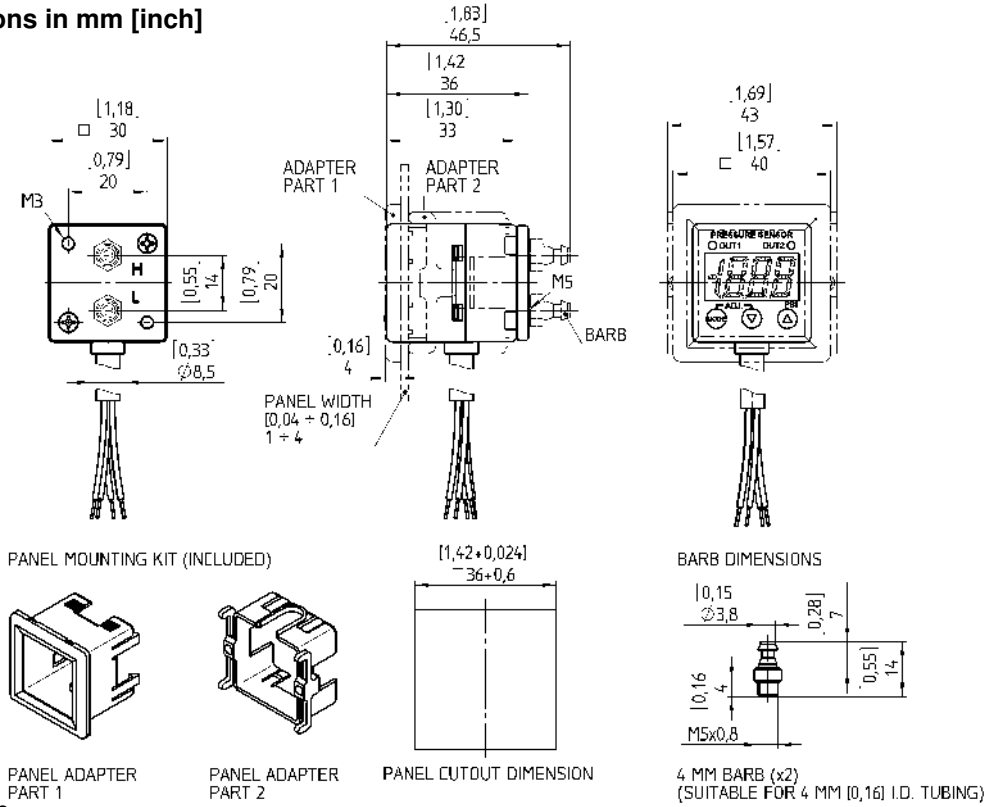
Electrical Connection: 2 m (6 ft) cable pigtail

Weight: Approx. 75 g

Mounting: Panel mounting bracket included

Media: Clean, dry air/gases compatible with Aluminum, ABS, Ceramic, Silicon, and Silicone RTV

General dimensions in mm [inch]



Order information

Type	Accuracy	Process connection	Output signal	Electrical connection	Range	Eng. unit	Options	
GC30	(9) 1,5 %	(M5B) 4mm ID barb	(1N) 1-5 VDC analog w/2x NPN type switches	(F4) 2 m (6') cable	Bidirectional:		(NH) Tagging wired (RH) 9 point NIST traceable calibration certificate	
					P25	±0,25		IWL in. H ₂ O
					P5	±0,5		
					1	±1		
					2P5	±2,5		
					5	±5		
			10	±10				
			25	±25	PAL Pa			
			50	±50				
			100	±100				
			200	±200				
			500	±500				
1	±1	KPL kPa						
2	±2							
5	±5							
Unidirectional:			IW in. H ₂ O					
P25	0,25							
P5	0,5							
1	1							
2P5	2,5							
5	5							
10	10	PA Pa						
25	25							
50	50							
100	100							
200	200							
500	500							
1	1	KP kPa						
2	2							
5	5							

Order example

Type	Accuracy	Process connection	Output signal	Electrical connection	Range	Engineering unit	Options
GC30	9	M5B	1N	F4	100	PA	RH

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