## **Data Sheet**

## **GC30 Differential Pressure Transducer**

#### **FEATURES**

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

#### **TYPICAL USES**

- Filter monitoring
- Clean room pressure differential
- Vacuum/Suction pressure sensing & control
- Fan speed control
- Alarm and control

### PERFORMANCE SPECIFICATIONS

Reference Temperature:	73 °F (23 °C)						
Analog Output:	1-5 Vdc						
Accuracy:	$\pm 1.5\%$ of span Accuracy 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:							
Туре:	NPN/PNP open collector up to 30 Vdc/80 mA						
Setting Accuracy:	$\pm 1.5\%$ 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 full scale sensor range						
Display:							
Туре:	3½ digit, 10 mm LED						
Accuracy:	$\pm 1.5\%$ 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						
ENVIRONMENT	AL SPECIFICATIONS						
Temperature Effects: (ref. 73°F (23°C))	Zero/Span: $\pm 0.09\%$ /°F ( $\pm 0.15\%$ /°C): $\pm 2.5$ ″W.C., 0/2.5″W.C. and below $\pm 0.06\%$ /°F ( $\pm 0.10\%$ /°C): $\pm 5.0$ ″W.C., 0/5.0″W.C. and above						
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						



GC30

**Differential Pressure Transducer** 



#### **KEY BENEFITS**

- Ultra-compact design
- User may configure analog output scaling to any range within full scale of sensor range.

FUNCTIONAL SPECIFICATIONS								
Max Static (Line) Pressure:	Proof: 7.5 psid	Burst: 25 psig						
7.5 psi (50 kPa)	(50 kPa)	(170 kPa)						
CE Compliance	EN61326-1 2006, EN61326-2-3 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:	30 Vdc / 80 mA (N	flax.)						
PNP:	Voltage drop 1 Vd	c (Max.) / 80 mA (Max.)						



# **Data Sheet**

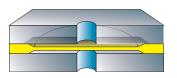


PHYSICAL SPECIFICATIONS					
Pressure Connection Size:	4 mm barb				
Environmental Rating:	IP40				
Weight:	Approx. 75 grams				
Mounting:	Panel mounting bracket included				
Electrical Connection:	6´ cable pigtail				
WETTED MATERIAL					
Media					
Clean, dry air/gas compatible with Aluminum, Titanium, ABS, Ceramic, Silicon & Silicone RTV. NOT FOR USE ON LIQUIDS					

**NON-WETTED** 

Enclosure ABS, polycarbonate, aluminum Featuring a highly reliable variable capacitance sensor using the patented Ashcroft<sup>®</sup> Si-Glass<sup>®</sup> 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.

ORDERING CODE	Example:	GC30	9	M5B	1N	F4	P25IWL	– XRH
Model								
GC30 - Ultra-compact digital differential pressure sensor		GC30						
Accuracy				_				
9 - ±1.5% of span			9	_				
Pressure Connection								
M5B - 4mm ID Barb Output Signal				M5B				
1N - 1-5 Vdc: Analog w/2X NPN Type switches					1N	-		
1P - 1-5 Vdc: Analog w/2X PNP Type switches						-		
Electrical Connection						-		
F4 - 6' (2m) cable						F4		
Pressure Range								
Bidirectional								
P25IWL - ±0.25 IWC							P25IWL	
P5IWL - ±0.5 IWC								
1IWL - ±1.0 IWC								
2P5IWL - ±2.5 IWC								
5IWL - ±5 IWC								
10IWL - ±10 IWC								
25IWL - ±25 IWC								
Differential								
P25IW - 0.25 IWC								
P5IW - 0.5 IWC								
1IW - 1.0 IWC								
2P5IW - 2.5 IWC								
5IW - 5 IWC								
10IW - 10 IWC								
25IW - 25 IWC								
Option (if including an option(s) must include an "X")								X
RH - Traceable calibration certificate								RH

All specifications are subject to change without notice. All sales subject to standard terms and conditions. Ashcroft®, Trust the Shield® are trademarks of Ashcroft Inc. For more information, see <u>Ashcroft Brands & Trademarks</u> ©2022 Ashcroft Inc. GC-30\_transducer\_ds\_RevB\_12-06-22

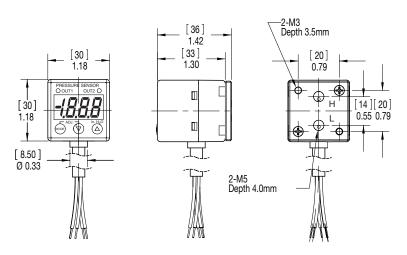


# **GC30 Differential Pressure Transducer**

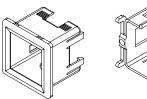


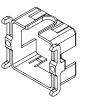
#### DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



### Panel Mounting Kit (included)





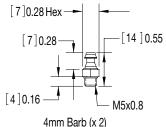


Panel adapter 2 (X1)

Panel cutout dimension

[36] 1.42 [36] 1.42

#### **Barb Dimensions**



(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