

## Data Sheet

# GXLdp Differential Indicating Pressure Transducer



### FEATURES

- TruAccuracy™- Terminal Point Accuracy method includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors.
- $\pm 0.25\%$  of span accuracy available for any specific range.
- Field selectable outputs: 4-20 mA, 0-5 Vdc, 1-5 Vdc 1-6 Vdc, 0-10 Vdc
- Exclusive patented Ashcroft SpoolCal™ actuator provides in-place system calibration
- Large LCD with backlight
- Wall, panel or DIN rail mountable versions
- Two programmable switch outputs (optional)

### TYPICAL USES

- Pharma/Biotech research and production areas
- HVAC Building automation and comfort control
- Air flow measurements
- Critical environmental control - isolation rooms/cleanrooms



GXLdp  
Pressure Transmitter



### PERFORMANCE SPECIFICATIONS

Accuracy Class:	$\pm 0.25\%$ of span, $\pm 0.5\%$ of span ( <b>Terminal Point Method</b> : includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors)
Reference Temperature:	70 °F $\pm 2$ °F (21 °C $\pm 1$ °C)
Stability:	$\leq \pm 0.25\%$ of span/year at reference conditions
Media Compatibility:	Clean, dry and non-corrosive gas NOT FOR USE WITH LIQUIDS
Adjustable Display Response Time:	250 ms, 1 sec, 3 sec or 5 sec

### ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:	Storage:	-22 °F to 158 °F (-30 °C to 70 °C)
	Operating:	-4 °F to 158 °F (-20 °C to 70 °C)
	Compensated:	35 °F to 130 °F (1.6 °C to 54 °C)
Thermal Coefficients:	Zero:	$\pm 0.03\%$ of Span/°F
	Span:	$\pm 0.03\%$ of Span/°F
		(From 70 °F reference temperature)

### FUNCTIONAL SPECIFICATIONS

Max. Static (Line) Pressure:	Proof Pressure:	Burst Pressure:
25 psi	15 psid	25 psid
Mounting Position Effect:	$\pm 1\%$ of span/g (Calibration in vertical position is standard)	

### ELECTRICAL SPECIFICATIONS

Circuit Protection:	Reverse polarity and miswire protected
Zero Adjustment:	$\pm 5\%$ of span (accessible through menu)
Span Adjustment:	$\pm 5\%$ of full-scale value (accessible through menu)

### KEY BENEFITS

- Spool Cal™ process valve actuator provides in-place system calibration without disturbing any process tubes
- IP67/NEMA 4 housing
- Traceable calibration chart (standard)
- Excellent long term stability
- 3 year warranty

Output Supply:	Supply Voltage:	Maximum Supply Current/ Power Consumption:
4-20 mA (2 wire)	12-40 Vdc	23 mA (1 VA)
4-20 mA (3 wire)	12-40 Vdc	0.75 VA
0-5 Vdc (3 wire)	12-40 Vdc/24 Vac ( $\pm 20\%$ )	0.75 VA / 1.75 VA
1-5 Vdc (3 wire)	12-40 Vdc/24 Vac ( $\pm 20\%$ )	0.75 VA / 1.75 VA
1-6 Vdc (3 wire)	12-40 Vdc/24 Vac ( $\pm 20\%$ )	0.75 VA / 1.75 VA
0-10 Vdc (3 wire)	12-40 Vdc/24 Vac ( $\pm 20\%$ )	0.75 VA / 1.75 VA

(Supply currents listed above do not include contribution from the switch function)

LCD Display: 3-5 digits depending on range

LCD Screen Dimensions: 2.63" Width x 1.38" Height

LCD Character Size: 7-segment (Numeric display):  
0.32" Width x 0.65" Height  
14-segment (Alphanumeric display):  
0.28" Width x 0.49" Height

# Data Sheet

## GXLdp Differential Indicating Pressure Transducer

### PHYSICAL SPECIFICATIONS

Pressure: 1/8 NPT female  
 Connections: 1/4 Barbed male  
 3/16 Barbed male  
 NOTE: Fittings kit includes all three fittings that will be supplied as standard

Electrical Connection: 1/2 NPT Female Conduit Connection/PG9 Watertight Cable Gland included.  
 Electrical connections made to a pluggable terminal block which accepts 18-24 AWG wires.

Weight: 0.8 lbs

Mounting: DIN rail, wall mount, optional panel mount

Enclosure Rating: UL 94-V0 Flame- retardant ABS, IP67/NEMA 4

### SWITCH FEATURE

Switch outputs: (2) NPN or PNP - Field programable (set and reset)  
 Note: Switch function can only be used with a 3-wire output

### WETTED MATERIAL

Media

Clean, dry air/gases compatible with Aluminum, Titanium, PBT, Buna, Glass, Gold, Silicone Rubber, Silicon, Silicone RTV and Brass  
**NOT FOR USE WITH LIQUIDS**

### NON-WETTED

Housing

Fire-retardant ABS (Meets UL 94-V0)

### ORDERING CODE

Example:

<b>Model</b>	<b>GX</b>	<b>3</b>	<b>P25IW</b>	<b>-XPV</b>
GX - GXLdp	GX			
<b>Accuracy</b>				
3 - ±0.25% of span		3		
5 - ±0.5% of span				
<b>Pressure Ranges (per listing on page 3, 4, 5)</b>				
0.25 in. H <sub>2</sub> O - P25IW			P25IW	
<b>Options</b>				
PV - SpoolCal™				XPV
1S - Switch				
HK - Panel mount				
NH - Stainless steel tag				
NN - Paper tag				

Nine point [traceable calibration certificate](#) standard with every unit

### TruAccuracy

### What Does It Mean?

Ashcroft's TruAccuracy™ specification is exclusively based on terminal point methodology instead of statistically derived schemes like 'best fit straight line'.

TruAccuracy™ means the Ashcroft GXLdp has ±0.25% of span accuracy out of the box. Zero and span setting errors are already included in the ±0.25% of span accuracy spec.

The GXLdp is ready to be installed with no additional calibration adjustments required.

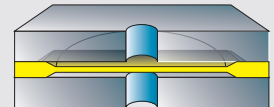
A unit from another manufacturer advertised as ±0.25% best fit straight line may actually be a ±1.25% to ±2.25% device. Using best fit straight line method, the accuracy spec does not include zero and span setting errors, which can be as much as ±1.00% each.

### Ashcroft® Si-Glas™ Sensor Technology

Featuring a highly reliable variable capacitance sensor using the patented Ashcroft® Si-Glas™ 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.



## GXLdp Differential Indicating Pressure Transducer

**STANDARD PRESSURE RANGES****Inches Water Column  
Unidirectional**P1IW - 0.10 in. H<sub>2</sub>O differentialP2IW - 0.20 in. H<sub>2</sub>O differentialP25IW - 0.25 in. H<sub>2</sub>O differentialP4IW - 0.40 in. H<sub>2</sub>O differentialP5IW - 0.50 in. H<sub>2</sub>O differentialP6IW - 0.60 in. H<sub>2</sub>O differentialP75IW - 0.75 in. H<sub>2</sub>O differential1IW - 1.00 in. H<sub>2</sub>O differential2IW - 2.00 in. H<sub>2</sub>O differential2P5IW - 2.50 in. H<sub>2</sub>O differential3IW - 3.00 in. H<sub>2</sub>O differential5IW - 5.00 in. H<sub>2</sub>O differential10IW - 10.00 in. H<sub>2</sub>O differential15IW - 15.00 in. H<sub>2</sub>O differential20IW - 20.00 in. H<sub>2</sub>O differential25IW - 25.00 in. H<sub>2</sub>O differential**Inches Water Column  
Bi-directional**P05IWL - ±0.05 in. H<sub>2</sub>O differentialP1IWL - ±0.10 in. H<sub>2</sub>O differentialP25IWL - ±0.25 in. H<sub>2</sub>O differentialP5IWL - ±0.50 in. H<sub>2</sub>O differential1IWL - ±1.00 in. H<sub>2</sub>O differential2IWL - ±2.00 in. H<sub>2</sub>O differential2P5IWL - ±2.50 in. H<sub>2</sub>O differential3IWL - ±3.00 in. H<sub>2</sub>O differential5IWL - ±5.00 in. H<sub>2</sub>O differential8IWL - ±8.00 in. H<sub>2</sub>O differential10IWL - ±10.00 in. H<sub>2</sub>O differential15IWL - ±15.00 in. H<sub>2</sub>O differential25IWL - ±25.00 in. H<sub>2</sub>O differential

## GXLdp Differential Indicating Pressure Transducer

### STANDARD PRESSURE RANGES

#### Pascal/KiloPascal Unidirectional

25PA - 25 Pa differential

50PA - 50 Pa differential

60PA - 60 Pa differential

100PA - 100 Pa differential

125PA - 125 Pa differential

160PA - 160 Pa differential

200PA - 200 Pa differential

250PA - 250 Pa differential

300PA - 300 Pa differential

400PA - 400 Pa differential

500PA - 500 Pa differential

600PA - 600 Pa differential

1KPA - 1.00 kPa differential

1P6KPA - 1.60 kPa differential

2KPA - 2.00 kPa differential

2P5KPA - 2.50 kPa differential

4KPA - 4.00 kPa differential

5KPA - 5.00 kPa differential

6KPA - 6.00 kPa differential

#### Pascal/KiloPascal Bi-directional

15PAL -  $\pm 15$  Pa differential

25PAL -  $\pm 25$  Pa differential

30PAL -  $\pm 30$  Pa differential

50PAL -  $\pm 50$  Pa differential

60PAL -  $\pm 60$  Pa differential

100PAL -  $\pm 100$  Pa differential

125PAL -  $\pm 125$  Pa differential

160PAL -  $\pm 160$  Pa differential

200PAL -  $\pm 200$  Pa differential

300PAL -  $\pm 300$  Pa differential

400PAL -  $\pm 400$  Pa differential

500PAL -  $\pm 500$  Pa differential

600PAL -  $\pm 600$  Pa differential

1KPAL -  $\pm 1.00$  kPa differential

1P25KPAL -  $\pm 1.25$  kPa differential

1P6KPAL -  $\pm 1.60$  kPa differential

2KPAL -  $\pm 2.00$  kPa differential

2P5KPAL -  $\pm 2.50$  kPa differential

4KPAL -  $\pm 4.00$  kPa differential

5KPAL -  $\pm 5.00$  kPa differential

## GXLdp Differential Indicating Pressure Transducer

### STANDARD PRESSURE RANGES

#### Millibar Unidirectional

P25MB - 0.25 mb differential

P5MB - 0.50 mb differential

P6MB - 0.60 mb differential

1MB - 1.00 mb differential

1P25MB - 1.25 mb differential

1P6MB - 1.60 mb differential

2MB - 2.00 mb differential

2P5MB - 2.50 mb differential

3MB - 3.00 mb differential

4MB - 4.00 mb differential

5MB - 5.00 mb differential

6MB - 6.00 mb differential

10MB - 10.00 mb differential

16MB - 16.00 mb differential

20MB - 20.00 mb differential

25MB - 25.00 mb differential

40MB - 40.00 mb differential

50MB - 50.00 mb differential

60MB - 60.00 mb differential

#### Millibar Bi-directional

P15MBL -  $\pm 0.15$  mb differential

P25MBL -  $\pm 0.25$  mb differential

P3MBL -  $\pm 0.30$  mb differential

P5MBL -  $\pm 0.50$  mb differential

P6MBL -  $\pm 0.60$  mb differential

1MBL -  $\pm 1.00$  mb differential

1P25MBL -  $\pm 1.25$  mb differential

1P6MBL -  $\pm 1.60$  mb differential

2MBL -  $\pm 2.00$  mb differential

3MBL -  $\pm 3.00$  mb differential

4MBL -  $\pm 4.00$  mb differential

5MBL -  $\pm 5.00$  mb differential

6MBL -  $\pm 6.00$  mb differential

10MBL -  $\pm 10.00$  mb differential

12P5MBL -  $\pm 12.50$  mb differential

16MBL -  $\pm 16.00$  mb differential

20MBL -  $\pm 20.00$  mb differential

25MBL -  $\pm 25.00$  mb differential

40MBL -  $\pm 40.00$  mb differential

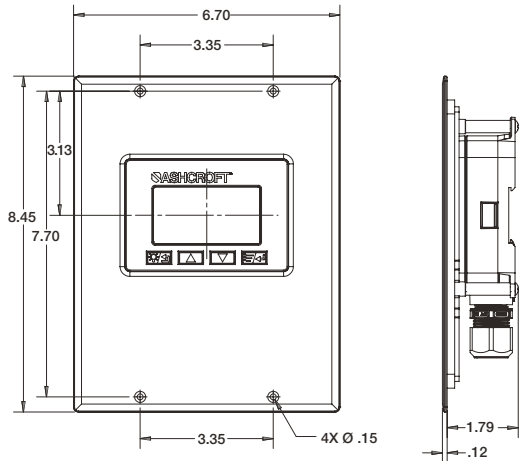
50MBL -  $\pm 50.00$  mb differential

# Data Sheet

## GXLdp Differential Indicating Pressure Transducer

### PANEL MOUNTING DIMENSIONS are identified in inches

For reference only, consult Ashcroft for specific dimensional drawings.



### GENERAL DIMENSIONS are identified in inches

For reference only, consult Ashcroft for specific dimensional drawings.

