

## 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

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### 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 attached range chart)</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.

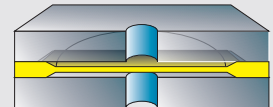
A unit from another manufacturer advertised as ±0.25% best fit straight line may actually be a ±1.25% to ±2.25% device. Using best fit straight line method, the accuracy spec does not include zero and span setting errors, which can be as much as ±1.00% each.

### 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.



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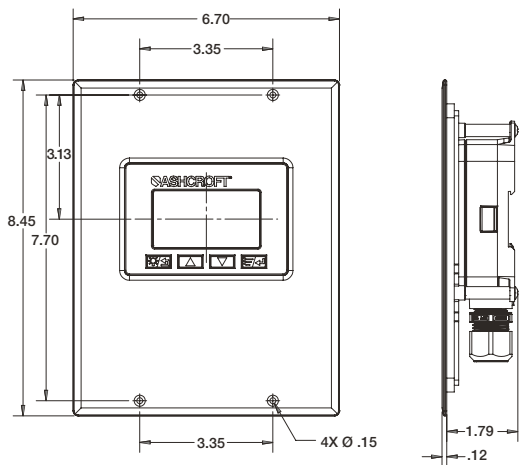
## GXLdp Differential Indicating Pressure Transducer

### STANDARD PRESSURE RANGES

in. H <sub>2</sub> O Unid	Code	in. H <sub>2</sub> O Bidir	Code	Pa Unid	Code	Pa Bidir	Code	mb Unid	Code	mb Bidir	Code
0.10 in. H <sub>2</sub> O	P1IW	(±) 0.05 in. H <sub>2</sub> O	P05IWL	25 Pa	25PA	(±) 15 Pa	15PAL	0.25 mb	P25MB	(±) 0.15 mb	P15MBL
0.20 in. H <sub>2</sub> O	P2IW	(±) 0.10 in. H <sub>2</sub> O	P1IWL	50 Pa	50PA	(±) 25 Pa	25PAL	0.50 mb	P5MB	(±) 0.25 mb	P25MBL
0.25 in. H <sub>2</sub> O	P25IW	(±) 0.25 in. H <sub>2</sub> O	P25IWL	60 Pa	60PA	(±) 30 Pa	30PAL	0.60 mb	P6MB	(±) 0.30 mb	P3MBL
0.40 in. H <sub>2</sub> O	P4IW	(±) 0.50 in. H <sub>2</sub> O	P5IWL	100 Pa	100PA	(±) 50 Pa	50PAL	1.00 mb	1MB	(±) 0.50 mb	P5MBL
0.50 in. H <sub>2</sub> O	P5IW	(±) 1.00 in. H <sub>2</sub> O	1IWL	125 Pa	125PA	(±) 60 Pa	60PAL	1.25 mb	1P25MB	(±) 0.60 mb	P6MBL
0.60 in. H <sub>2</sub> O	P6IW	(±) 2.00 in. H <sub>2</sub> O	2IWL	160 Pa	160PA	(±) 100 Pa	100PAL	1.60 mb	1P6MB	(±) 1.00 mb	1MBL
0.75 in. H <sub>2</sub> O	P75IW	(±) 2.50 in. H <sub>2</sub> O	2P5IWL	200 Pa	200PA	(±) 125 Pa	125PAL	2.00 mb	2MB	(±) 1.25 mb	1P25MBL
1.00 in. H <sub>2</sub> O	1IW	(±) 3.00 in. H <sub>2</sub> O	3IWL	250 Pa	250PA	(±) 160 Pa	160PAL	2.50 mb	2P5MB	(±) 1.60 mb	1P6MBL
2.00 in. H <sub>2</sub> O	2IW	(±) 5.00 in. H <sub>2</sub> O	5IWL	300 Pa	300PA	(±) 200 Pa	200PAL	3.00 mb	3MB	(±) 2.00 mb	2MBL
2.50 in. H <sub>2</sub> O	2P5IW	(±) 8.00 in. H <sub>2</sub> O	8IWL	400 Pa	400PA	(±) 300 Pa	300PAL	4.00 mb	4MB	(±) 3.00 mb	3MBL
3.00 in. H <sub>2</sub> O	3IW	(±) 10.00 in. H <sub>2</sub> O	10IWL	500 Pa	500PA	(±) 400 Pa	400PAL	5.00 mb	5MB	(±) 4.00 mb	4MBL
5.00 in. H <sub>2</sub> O	5IW	(±) 15.00 in. H <sub>2</sub> O	15IWL	600 Pa	600PA	(±) 500 Pa	500PAL	6.00 mb	6MB	(±) 5.00 mb	5MBL
10.00 in. H <sub>2</sub> O	10IW	(±) 25.00 in. H <sub>2</sub> O	25IWL	1.00 kPa	1KPA	(±) 600 Pa	600PAL	10.00 mb	10MB	(±) 6.00 mb	6MBL
15.00 in. H <sub>2</sub> O	15IW			1.60 kPa	1P6KPA	(±) 1.0 kPa	1KPAL	16.00 mb	16MB	(±) 10.00 mb	10MBL
20.00 in. H <sub>2</sub> O	20IW			2.00 kPa	2KPA	(±) 1.25 kPa	1P25KPAL	20.00 mb	20MB	(±) 12.50 mb	12P5MBL
25.00 in. H <sub>2</sub> O	25IW			2.50 kPa	2P5KPA	(±) 1.6 kPa	1P6KPAL	25.00 mb	25MB	(±) 16.00 mb	16MBL
				4.00 kPa	4KPA	(±) 2.00 kPa	2KPAL	40.00 mb	40MB	(±) 20.00 mb	20MBL
				5.00 kPa	5KPA	(±) 2.50 kPa	2P5KPAL	50.00 mb	50MB	(±) 25.00 mb	25MBL
				6.00 kPa	6KPA	(±) 4.00 kPa	4KPAL	60.00 mb	60MB	(±) 40.00 mb	40MBL
						(±) 5.00 kPa	5KPAL			(±) 50.00 mb	50MBL

### 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.

