

Data Sheet

GXLdp Differential Indicating Pressure Transmitter

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

TruAccuracy™



GXLdp
Pressure Transmitter



PERFORMANCE SPECIFICATIONS

Accuracy Class:	$\pm 0.25\%$ of span, $\pm 0.5\%$ of span (Terminal Point Method: includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors)
Reference Temperature:	70°F $\pm 2^\circ$ F (21°C $\pm 1^\circ$ 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 176°F (-30°C to 80°C) Operating: -4°F to 176°F (-20°C to 80°C) Compensated: 35°F to 130°F (1.6°C to 54°C)
Thermal Coefficients:	Zero: $\pm 0.03\%$ of Span/ $^\circ$ F Span: $\pm 0.03\%$ of Span/ $^\circ$ 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
- NIST 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:

Model

GX - GXLdp

Accuracy

3 - ±0.25% of span

5 - ±0.5% of span

Pressure Ranges (per attached range chart)

0.25 in. H₂O - P25IW

Options

PV - Spool Cal

1S - Switch

HK - Panel mount

NH - SS tag

NN - Paper tag

Nine point 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.

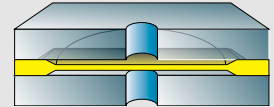
A unit from another manufacturer advertised as ±0.25% best fit straight line may actually be a ±1.25% to ±2.25% device. Using best fit straight line method, the accuracy spec does not include zero and span setting errors, which can be as much as ±1.00% each.

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.



GX 3 P25IW -XPV

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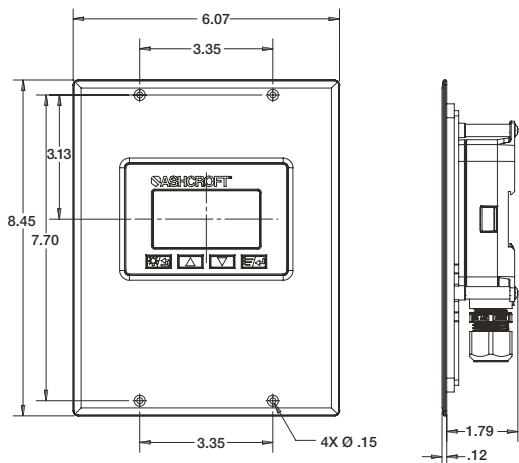
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STANDARD PRESSURE RANGES

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

