



Low Power Differential Pressure Transmitter 1-5 VDC Output - 3mA Maximum Current

LOW POWER DESIGN:

When you need a low power, low voltage transmitter, the GPIDP-V Series Transmitter delivers:

- 1 to 5 V dc Output Signal
- 9 V dc Minimum Voltage
- 3 mA Maximum Current

HIGH DEPENDABILITY:

Silicon strain gauge sensors successfully field-proven in hundreds of thousands of installations.

INTELLIGENT TRANSMITTER FEATURES AT AN ECONOMICAL PRICE:

When you want the flexibility and performance of a configurable, intelligent transmitter but you don't need a digital output signal, these transmitters provide exceptional benefits at a very affordable price:

Liquid Crystal Display (LCD) Digital Indicator with On-Board Pushbuttons

- Pushbutton Configuration and Calibration:
- Zero and Span Settings
- Adjustable Damping
- Forward or Reverse Output
- Failsafe Output; upscale or downscale
- Reranging without applying pressure

GPIDP
LOW PROFILE
STRUCTURE LP1



GPIDP
Traditional
Structure

GPIDP
Low Profile
Structure LP2



GP:50 reserves the right to make product improvements and amendments to the product specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.

A5SL-GPIDP-V.00

GENERAL SPECIFICATIONS

GPIDP Series Differential Transmitter

This transmitter is part of a complete family of Differential pressure transmitters all using field-proven silicon strain gauge sensor technology.

High Performance

Microprocessor-based correction provides excellent accuracy and ambient temperature compensation.

Output Signal

1to5Vdc

Output Load

1 to 10 megohms

Supply Voltage and Current Requirements

SUPPLY VOLTAGE - 9 to 15.5 V dc

SUPPLY CURRENT - 3 mA

Supply Voltage Effect

The output changes less than 0.005% of calibrated span for each 1 V change within the specified supply voltage requirements.

Power-Up Time

Less than 5.0 seconds for output to reach first valid measurement.

Mounting Position

The transmitter may be mounted in any orientation.

Mounting Position Effect

Any zero effect caused by the mounting position can be eliminated by re-zeroing. There is no span effect.

Field Wiring Reversal

Reversal of field wiring will not damage transmitter.

Suppressed Zero and Elevated Zero Ranges

These ranges are acceptable as long as Span and Range limits are not exceeded.

Zero and Span Adjustments

Zero and span adjustments accomplished using the pushbuttons on the LCD Indicator. See Figure 3. Adjustable Damping Transmitter response time is normally 0.75 s, or the electronically adjustable setting of 0 (none), 2, 4, or 8 seconds, whichever is greater, for a 90% recovery from an 80% input step as defined in ANSI@/ISA@ S51.1. (For 63.2% recovery, 0.50 s with sensors B to F, and 0.60 s for sensor A.)

Switching and Indirect Lightning Transients

Transmitter withstands transient surges to 2000 V common mode or 1000 V normal mode without permanent damage. Output shift is less than 1.0%. (Per ANSI@/IEEE C62.41-1980 and IEC Std. 801-5.)

European Union Directives

-Designed to comply with Electromagnetic Compatibility Requirements of European EMC Directive 89/336/EEC to the following CENELEC and IEC Standards: EN 50081-2, EN 50082-2, and IEC 801-2 through 801-6.

-Designed to meet NAMUR Part 1 Interference Immunity Requirement (EMC).

Designed to Applicable European Union Directives

-RFI Effect Output error is less than 0.1% of calibrated span for frequencies from 27 to 1000 MHz and field intensity of 30 V/m when transmitter is properly installed, shielded cable in conduit, grounding, and housing covers in place. (Per IEC Std. 801-3.)

Minimum Allowable Absolute Pressure vs. Transmitter Temperature

WITH SILICONE FILL FLUID Full vacuum: up to 121°C (250°F) WITH FLUORINERT® FILL FLUID Refer to Figure 1 below.

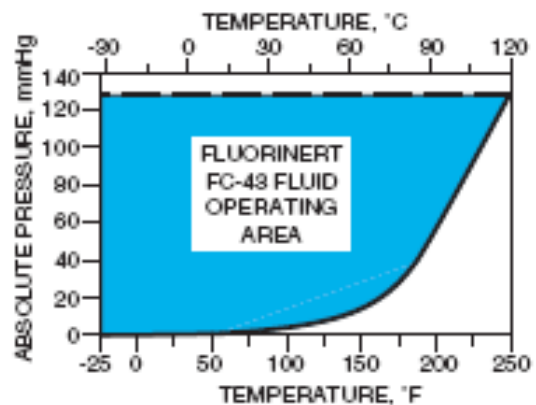


Figure 1. Minimum Allowable Absolute Pressure vs. Transmitter Temperature, Fluorinert FC-43, 2.6 cSt at 25°C (77°F)

GENERAL SPECIFICATIONS (Cont.)

Ease of Installation

Rotatable Topworks allows transmitter installation in tight places, allows indicator to be positioned in preferred direction, and eases field retrofit.

Two Conduit Entrances offer a choice of entry positions for ease of installation and self-draining of condensation regardless of mounting position and topworks rotation.

Wiring Guides and Terminations provide ease of wire entry and support, plenty of space to work and store excess wire, and large, rugged screw terminals for easy wire termination.

Environmental Protection

Transmitter is dusttight and weather resistant per IEC IP66 and provides the environmental and corrosion resistant protection of NEMA® Type 4X.

Electronics Housing and Housing Covers

Housing has two compartments to separate the electronics from the field connections. The housing and covers are made from low copper, die-cast aluminum alloy with an epoxy finish, or from 316 ss. Buna-N O-ring seals are used to seal the threaded housing covers, housing neck, and terminal block.

Electronics Module

Printed wiring assemblies are conformally coated for moisture and dust protection.

Electrical Terminations

Field wires enter through 1/2 NPT, PG 13.5, or M20 threaded entrances, as specified, on either side of the electronics housing. Wires terminate under screw terminals and washers on terminal block in the field terminal compartment as shown in Figure 2. Unused threaded field wire entrance is plugged to insure moisture and RFI/EMI protection.

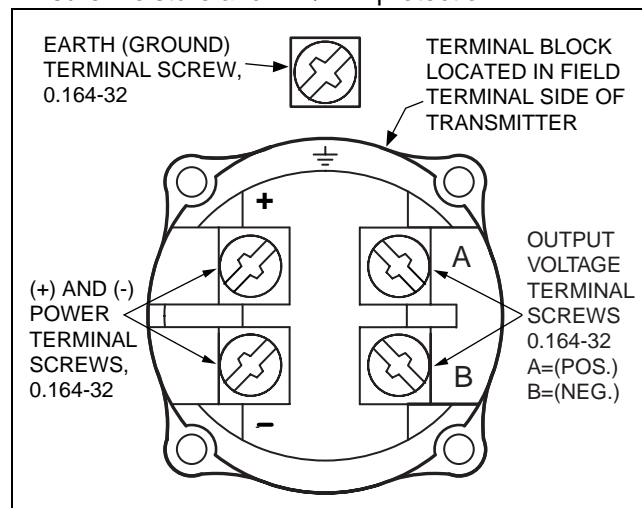


Figure 2. Field Terminal Connections

Three- or Four-Wire Connections

Transmitter is supplied with a 4-wire terminal block, with the two negative terminals connected internally. This means that the transmitter can be wired with either three wires for wiring economy, or four wires for maximum accuracy. For relatively short wiring runs having low resistance, 3-wire connections can be used to minimize wiring costs. However, a voltage drop in the common lead carrying the power supply current will cause an error in the 1 to 5 V dc signal. For wiring runs with high resistance due to long lengths (or other reasons), or for maximum accuracy, a 4-wire connection may be used to provide input-output isolation. With 4-wire configurations, voltage drop in the power supply loop will have minimal effect on measurement.

Standard Liquid Crystal Display (LCD) Indicator with On-Board Pushbuttons (Figure 3)

Indicator Provides:

- Two Lines; four numeric characters on top line; seven alphanumeric characters on bottom line.
- Measurement Readout; value on top line and units label on bottom line.
- Configuration and Calibration Prompts.

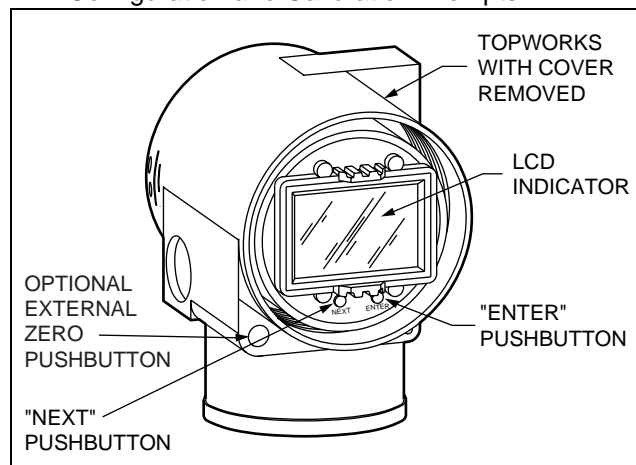


Figure 3. LCD Indicator with Pushbuttons

Optional External Zero Adjustment

An external pushbutton (Figure 3) mechanism is isolated from the electronics compartment and magnetically activates an internal reed switch through the housing. This eliminates a potential leak path for moisture or contaminants to get into the electronics compartment. This zero adjustment can be disabled by a configuration selection.

Optional Transmitter Mounting Bracket Sets

Numerous mounting bracket set options are offered to accommodate almost any mounting configuration required. See Dimensions-Nominal section.

GENERAL SPECIFICATIONS (Cont.)

Configuration and Calibration Data, and Electronic Upgradeability

All factory characterization data, and user configuration and calibration data are stored in the sensor. This means that the electronics module may be replaced, with one of like type, without the need for reconfiguration or recalibration. Although module replacement can affect accuracy up to 0.20% of span, this error can be removed by an mA trim without application of pressure.

Changing module types (from one protocol to another) may require reconfiguration and recalibration, as well as a different terminal block, but all factory characterization data is retained.

Optional Custom Configuration (Option -C2)

For the transmitter to be custom configured by the factory, the user must fill out a data form. If this option is not selected, a standard default configuration will be provided; for example:

Parameter	Standard (Default) Configuration	Example of Custom Configuration Option -C2
Calibrated Range • Pressure Units • LRV • URV	per S.O.(a) per S.O. per S.O.	KG/CM2(a) 0 5
Output Direction	Forward	Reverse
Electronic Damping	None	2.0 s
Failsafe Direction	Upscale	Downscale
Ext. Zero Option	Enabled	Disabled
Label (2nd Line)	(b)	KG/CM2(d)
Display LRV & URV • LRV • URV	(c) (c)	0(e) 5(e)

- (a) Select from list in Table 1.
- (b) Same as pressure units selected for calibrated range.
- (c) Same as calibrated range.
- (d) Same as pressure units selected for calibrated range, or percent. If square root mode (for GPIDP), custom flow rate units (up to 7 alphanumeric characters) may be specified.
- (e) Same as calibrated range or 0 to 100 for percent. If square root mode (for GPIDP), URV may be maximum flow rate value (up to 9999).

Table 1.

Allowable Pressure Units for Calibrated Range (a)

inH ₂ O	inHg	kPa	mbar	kg/cm ²
ftH ₂ O	mmHg	MPa	bar	psi
mmH ₂ O	Pa	torr	g/cm ²	atm

(a) Absolute or gauge pressure units, as applicable.

Pressure Seals

Pressure seals are used with GPIDP Transmitters when it is necessary to keep the transmitter isolated from the process. A sealed system is used for a process fluid that may be corrosive, viscous, subject to temperature extremes, toxic, sanitary or tend to collect and solidify.



Typical Transmitter/Pressure Seal Configurations

GENERAL SPECIFICATIONS COMMON TO ALL TRANSMITTERS (Cont.)

OPERATING, STORAGE, AND TRANSPORTATION CONDITIONS

Influence	Reference Operating Conditions	Normal Operating Conditions	Operative Limits	Storage and Transportation Limits
Process Connection Temp. • with Silicone Fill Fluid • with Fluorinert Fill Fluid	• $24 \pm 2^{\circ}\text{C}$ ($75 \pm 3^{\circ}\text{F}$) • $24 \pm 2^{\circ}\text{C}$ ($75 \pm 3^{\circ}\text{F}$)	• -29 to $+82^{\circ}\text{C}$ (-20 to $+180^{\circ}\text{F}$) • -29 to $+82^{\circ}\text{C}$ (-20 to $+180^{\circ}\text{F}$)	• -46 and $+121^{\circ}\text{C}$ (b) (-50 and $+250^{\circ}\text{F}$) (b) • -29 and $+121^{\circ}\text{C}$ (-20 and $+250^{\circ}\text{F}$)	• Not Applicable • Not Applicable
Electronics Temperature • with LCD Indicator (c)	• $24 \pm 2^{\circ}\text{C}$ ($75 \pm 3^{\circ}\text{F}$) • $24 \pm 2^{\circ}\text{C}$ ($75 \pm 3^{\circ}\text{F}$)	• -29 to $+82^{\circ}\text{C}$ (-20 to $+180^{\circ}\text{F}$) • -20 to $+82^{\circ}\text{C}$ (-4 to $+180^{\circ}\text{F}$)	• -40 and $+85^{\circ}\text{C}$ (-40 and $+185^{\circ}\text{F}$) • -29 and $+85^{\circ}\text{C}$ (-20 and $+185^{\circ}\text{F}$)	• -54 and $+85^{\circ}\text{C}$ (-65 and $+185^{\circ}\text{F}$) • -54 and $+85^{\circ}\text{C}$ (-65 and $+185^{\circ}\text{F}$)
Relative Humidity (d)	$50 \pm 10\%$	0 to 100%	0 and 100%	0 and 100% Noncondensing
Supply Voltage - mA Output	30 ± 0.5 V dc	11.5 to 42 V dc (e)	11.5 and 42 V dc (e)	Not Applicable
Output Load - mA Output	650 Ω	0 to 1450 Ω	0 and 1450 Ω	Not Applicable
Vibration	1 m/s^2 (0.1 "g")	6.3 mm (0.25 in) Double Amplitude: from 5 to 15 Hz with Aluminum Housing and from 5 to 9 Hz with 316 ss Housing ----- 0 to 30 m/s^2 (0 to 3 "g") from 15 to 500 Hz with Aluminum Housing; and 0 to 10 m/s^2 (0 to 1 "g") from 9 to 500 Hz with 316 ss Housing		11 m/s^2 (1.1 "g") from 2.5 to 5 Hz (in Shipping Package)
Mounting Position	Upright	Upright	No Limit	Not Applicable

(b) Selection of Option -J extends the low temperature limit of transmitters with silicone filled sensors down to -50°C (-58°F).

(c) Although the LCD will not be damaged at any temperature within the "Storage and Transportation Limits", updates will be slowed and readability decreased at temperatures outside the "Normal Operating Conditions".

(d) With topworks covers on and conduit entrances sealed.

(e) 11.5 V dc can be reduced to 11 V dc by using a plug-in shorting bar; see "Physical Specifications" sections.

GPIDP DIFFERENTIAL PRESSURE TRANSMITTERS (Figure 7)

Wide Rangeability

Five DP range sensors cover measurement spans from 0.125 kPa to 21 MPa (0.5 inH₂O to 3000 psi). This high turndown capability means that most differential pressure applications are satisfied with only these five ranges, simplifying your spare transmitter and spare parts requirements.

Sensor Corrosion Protection

Choice of 316L ss, Co-Ni-Cr, Hastelloy C, Monel, Gold-Plated 316L ss, and Tantalum materials. High corrosion resistance of Co-Ni-Cr (TI 037-078) means long service life without extra cost for exotic materials. See TI 37-75b for process applicability with Co-Ni-Cr and other wetted parts materials.

Process Connectors

Removable, gasketed process connectors allow a wide range of selections, including 1/4 NPT, 1/2 NPT, Rc 1/4, Rc 1/2, and weld neck connections. For very corrosive chemical processes, 1/2 NPT pvdf inserts are installed in the HI- and LO-side 316 ss covers when a traditional structure is used, and used as the process connectors.

GPIDP Transmitter Structures

GP:50 offers these transmitters with a traditional structure, and two low profile structures (LP1 and LP2). A brief description follows.

TRADITIONAL STRUCTURE (FIGURE 8)

This structure uses a design where the process connections are at 90° from the transmitter centerline. Vertical and horizontal mounting are provided for sensor cavity venting and draining.

LOW PROFILE STRUCTURE LP1 (FIGURE 9)

This structure provides process connections that are in line with the transmitter centerline. It is compact, and its light weight is ideal for direct mounting to process piping or manifold. An optional adapter plate (Options -P1 to -P8), shown in Figure 10 with the LP2, is offered for mounting to a Coplanar™ manifold. Sensor cavity venting and draining is provided for both vertical and horizontal installations.

LOW PROFILE STRUCTURE LP2 (FIGURE 10)

This structure, as with the LP1, is an in-line design which can be direct or bracket mounted. It is used for vertical installations, and can also be installed on existing Coplanar manifolds using an adapter plate (Options -P1 to -P8). Sensor cavity venting and draining are also provided.

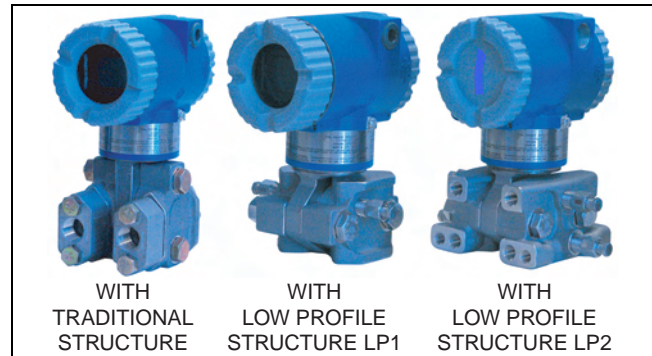


Figure 7. GPIDP Differential Pressure Transmitter

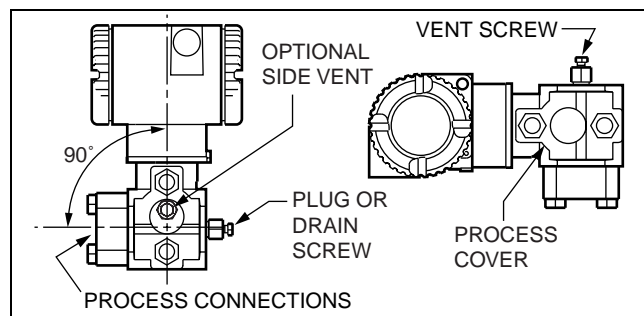


Figure 8. Traditional Structure

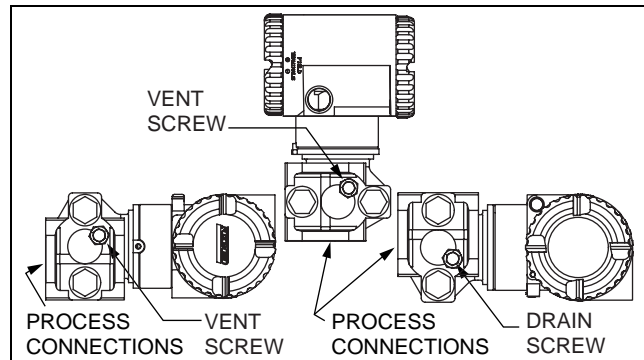


Figure 9. LP1 Structure

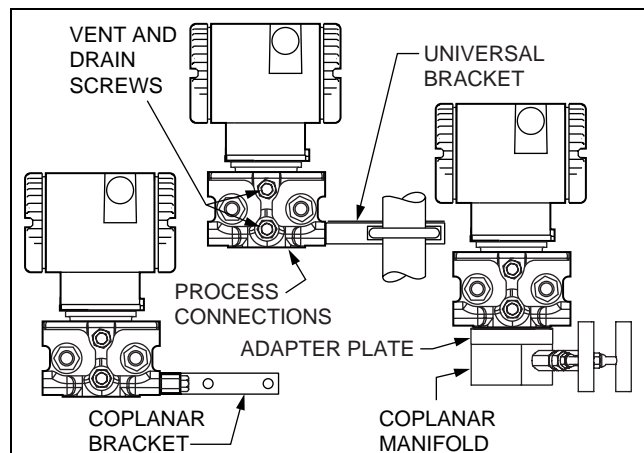


Figure 10. LP2 Structure

GPIDP DIFFERENTIAL PRESSURE TRANSMITTERS (Cont.)

Span and Range Limits for GPIDP Transmitters

Code	Span Limits			Range Limits		
	kPa	inH ₂ O	mbar	kPa	inH ₂ O	mbar
A (a)	0.12 and 7.5	0.5 and 30	1.2 and 75	-7.5 and +7.5	-30 and +30	-75 and +75
B	0.87 and 50	3.5 and 200	8.7 and 500	-50 and +50	-200 and +200	-500 and +500
C	7 and 210	28 and 840	70 and 2100	-210 and +210	-840 and +840	-2100 and +2100
Code	MPa	psi	bar or kg/cm ²	MPa	psi	bar or kg/cm ²
D	0.07 and 2.1	10 and 300	0.7 and 21	-0.21 and +2.1	-30 and +300	-2.1 and +21
E (c)	0.7 and 21(c)	100 and 3000 (c)	7 and 210 (c)	-0.21 and 21 (c)	-30 and +3000 (c)	-2.1 and +210 (c)

(a) Span Limit Code A not available when pressure seals are selected.

(b) Positive values indicate HI side of sensor at the high pressure, and negative values indicate LO side of sensor at the high pressure.

(c) When certain options are specified, the upper span and range limits are reduced as shown in the "Options Impact" table below.

Maximum Static and Proof Pressure Ratings for GPIDP Transmitters (a)

Transmitter Configuration (See Model Code for Description of Options)	Static Pressure Rating			Proof Pressure Rating (b)		
	MPa	psi	bar or kg/cm ²	MPa	psi	bar or kg/cm ²
With Option -D9 or -Y	40	5800	400	100	14500	1000
Standard or with Option -B2, -D3, or -D7	25	3625	250	100	14500	1000
With Option -B3	20	2900	200	70	11150	700
With Option -D1	16	2320	160	64	9280	640
With Option -B1 or -D5	15	2175	150	60	8700	600
With Option -D2, -D4, -D6, or -D8	10	1500	100	40	6000	400
With Structure Codes 78 and 79 (pvdf insert)	2.1	300	21	8.4	1200	84

(a) Refer to Model Code section for application and restrictions related to the items listed in the table.

(b) Proof pressure ratings meet ANSI/ISA® Standard S82.03-1988. Unit may become nonfunctional after application of proof pressure.

Impact of Certain Options on Span and Range Limits (a)

Option	Description (Also see Model Code)	Span and Range Limits Derated to:
-B3	B7M Bolts and Nuts (NACE)	20 MPa (2900 psi, 200 bar, or kg/cm ²)
-D1	DIN Construction	16 MPa (2320 psi, 160 bar or kg/cm ²)
-D5 or -B1	DIN Construction or 316 ss Bolting	15 MPa (2175 psi, 150 bar or kg/cm ²)
-D2, -D4, -D6, or -D8 (a)	DIN Construction (a)	10 MPa (1500 psi, 100 bar or kg/cm ²) (a)

(a) Refer to Model Code section for application and restrictions related to the items listed in the table.

Accuracy (Includes Linearity, Hysteresis, and Repeatability)

Code	If Span is:	Accuracy in % of Span is:
A, C, D, & E	≥ 6.7% of URL	±0.1%
B	≥ 5.0% of URL	±0.1%
A, C, D, & E	< 6.7% of URL	$\pm \left[(0.10) + (0.0067) \left(\frac{\text{URL}}{\text{Span}} \right) \right]$
B	< 5.0% of URL	$\pm \left[(0.10) + (0.005) \left(\frac{\text{URL}}{\text{Span}} \right) \right]$

NOTE

Accuracy stated is under Reference Operating Conditions; Zero-based Calibrations; Co-Ni-Cr or 316L ss sensor with silicone fluid; URL = upper range limit; and span = calibrated span.

Ambient Temperature Effect

Total effect for a 28°C (50°F) change within Normal Operating Condition limits is:

Span Code	Ambient Temperature Effect (a)
A (b)	±(0.18% URL + 0.05% Span)
B and C	±(0.03% URL + 0.10% Span)
D	±(0.05% URL + 0.08% Span)
E	±(0.08% URL + 0.05% Span)

(a) See PSS 2A-1Z11 A for additive effect with pressure seals.

(b) Span Limit Code A not applicable to transmitters with pressure seals.

GPIDP DIFFERENTIAL PRESSURE TRANSMITTERS (Cont.)
Static Pressure Effect on Differential Pressure

The zero and span shift for a 7 MPa, 1000 psi, change in static pressure is:

ZERO SHIFT (a)

Span Code	Zero Shift-Static Pressure Effect
A	±0.30% URL (b)
B and C	±0.10% URL
D	±0.50% URL (b)
E	±0.50% URL

(a)Can be calibrated out by zeroing at nominal line pressure.

(b)Per 3.5 MPa (500 psi) for Span Codes A and D.

SPAN SHIFT

±0.25% Reading (±0.030% for Span Code A)

Vibration Effect

Total effect is ±0.2% of URL per “g” for vibrations in the frequency range of 5 to 500 Hz; with double amplitudes of 6.3 mm (0.25 in) in the range of 5 to 15 Hz, or accelerations of 3 “g” in the range of 15 to 500 Hz, whichever is smaller, for transmitters with aluminum housings; and with double amplitudes of 6.3 mm (0.25 in) in the range of 5 to 9 Hz, or accelerations of 1 “g” in the range of 9 to 500 Hz, whichever is smaller, for transmitters with 316 ss housings.

Stability

Long term drift is less than ±0.05% of URL per year over a 5-year period.

Fill Fluid

Silicone Oil or Fluorinert FC43

Process Wetted Materials

PROCESS CONNECTION

316L ss, cs, Monel, or Hastelloy C, or pvdf (Kynar)

SENSOR DIAPHRAGM

316L ss, Co-Ni-Cr, Monel, Tantalum, Hastelloy C, or Gold-Plated 316L ss, as specified

GASKET

Glass-filled ptfе

Pressure Seal Diaphragm Material

Varies with pressure seal selected. See PSS 2A-1Z11 A.

Dimensions

Refer to Dimensions-Nominal section and to Dimensional Print DP 020-447.

Approximate Mass (with Process Connectors)

4.2 kg (9.2 lb) – with Traditional Structure

Add 0.1 kg (0.2 lb) – with Low Profile Structure LP1

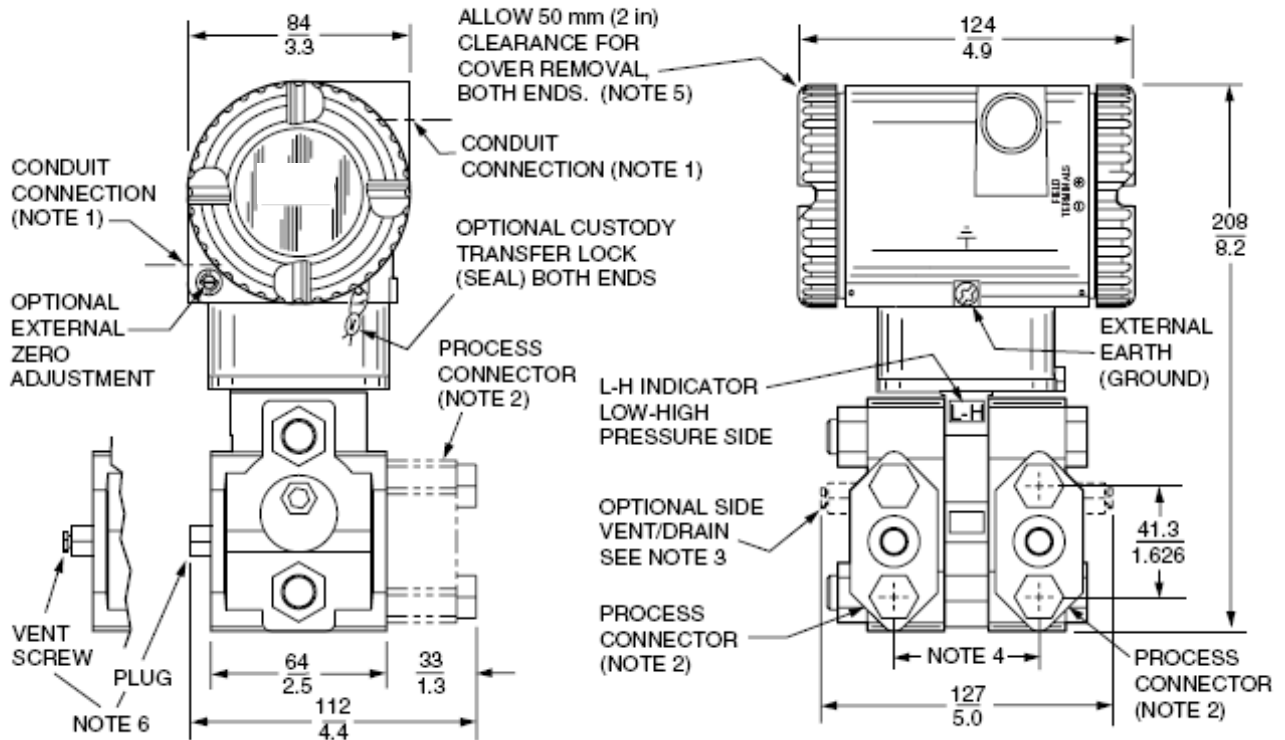
Add 0.8 kg (1.8 lb) – with Low Profile Structure LP2

Add 1.1 kg (2.4 lb) – with 316 ss Housing

DIMENSIONS - NOMINAL (Cont.)

**mm
In**

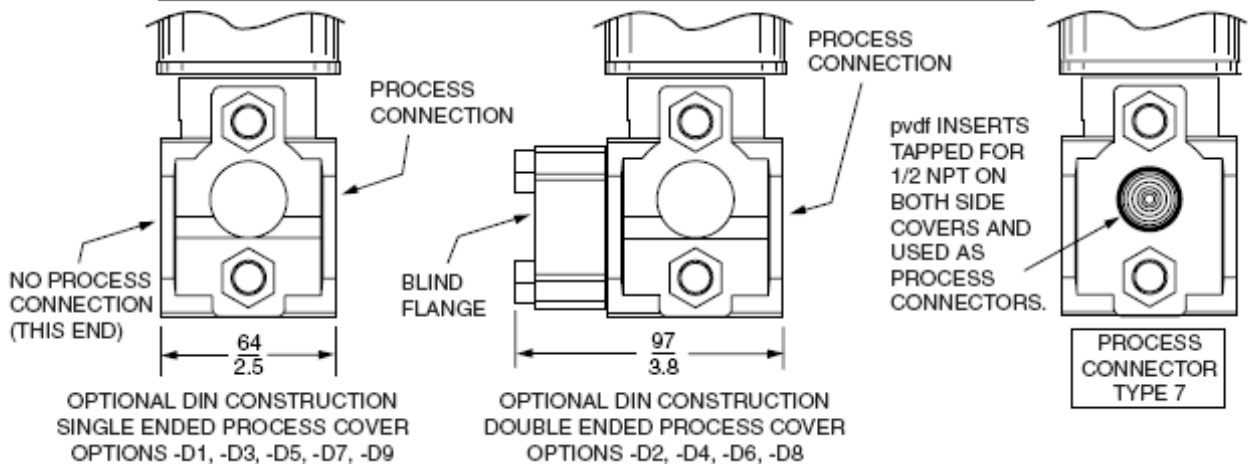
GPIDP TRANSMITTER WITH TRADITIONAL STRUCTURE



NOTES:

1. CONDUIT CONNECTION 1/2 NPT, PG 13.5, OR M20, BOTH SIDES: PLUG UNUSED CONNECTION WITH METAL PLUG (SUPPLIED).
2. PROCESS CONNECTORS MAY BE REMOVED AND TRANSMITTER MOUNTED DIRECTLY ON A MANIFOLD, OR CONNECTIONS MADE DIRECTLY TO PROCESS COVER USING 1/4 NPT INTERNAL THREAD IN PROCESS COVER.
3. PROCESS COVER CAN BE INVERTED MAKING OPTIONAL SIDE VENTS OR SIDE DRAINS
4. PROCESS CONNECTORS CAN BE INVERTED TO GIVE EITHER 51, 54, OR 57 mm (2.0, 2.125, OR 2.25 in) CENTER-TO-CENTER DISTANCE BETWEEN HIGH AND LOW PRESSURE CONNECTIONS.
5. TOPWORKS CAN BE ROTATED TO ANY POSITION WITHIN ONE TURN COUNTERCLOCKWISE OF THE FULLY TIGHTENED POSITION.
6. PROCESS COVER END PLUGS ARE SUBSTITUTED FOR VENT SCREWS WHEN OPTIONAL SIDE VENTS (NOTE 3) ARE SPECIFIED.

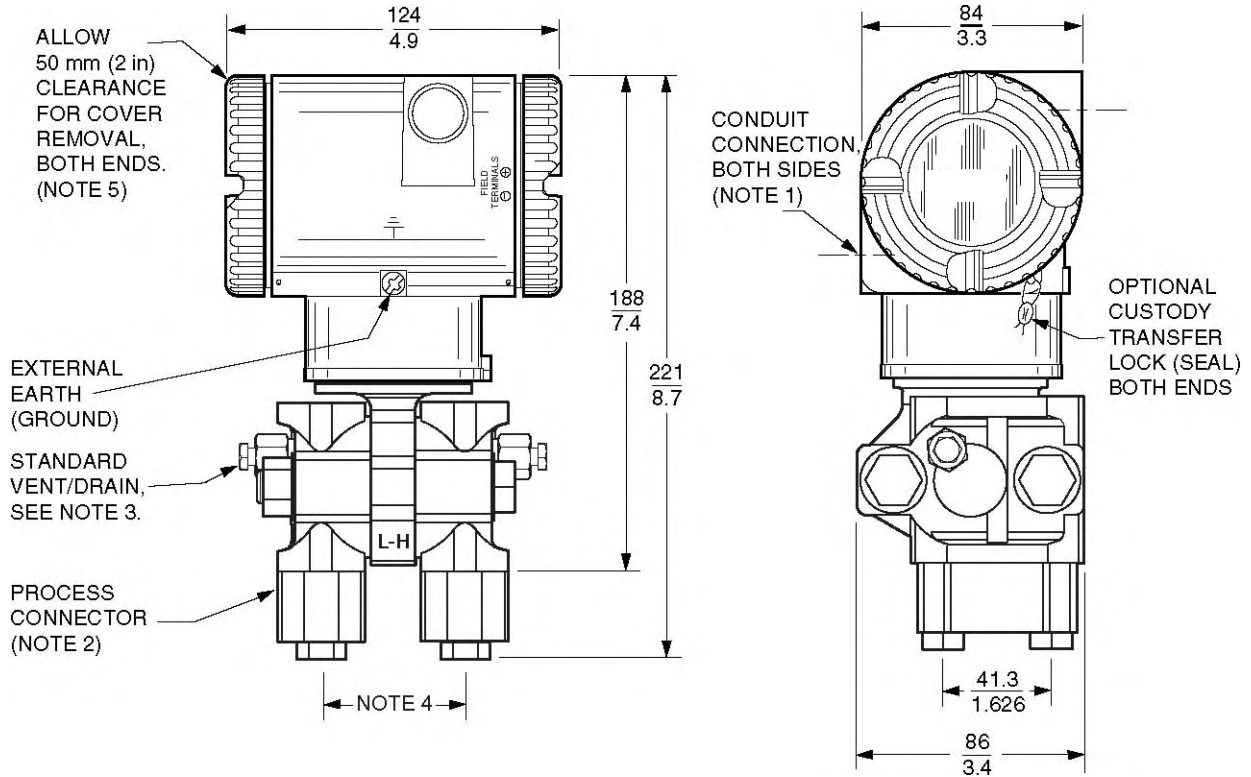
PROCESS CONNECTOR TYPE 7 AND DIN CONSTRUCTION OPTIONS



DIMENSIONS-NOMINAL (Cont.)

mm/in

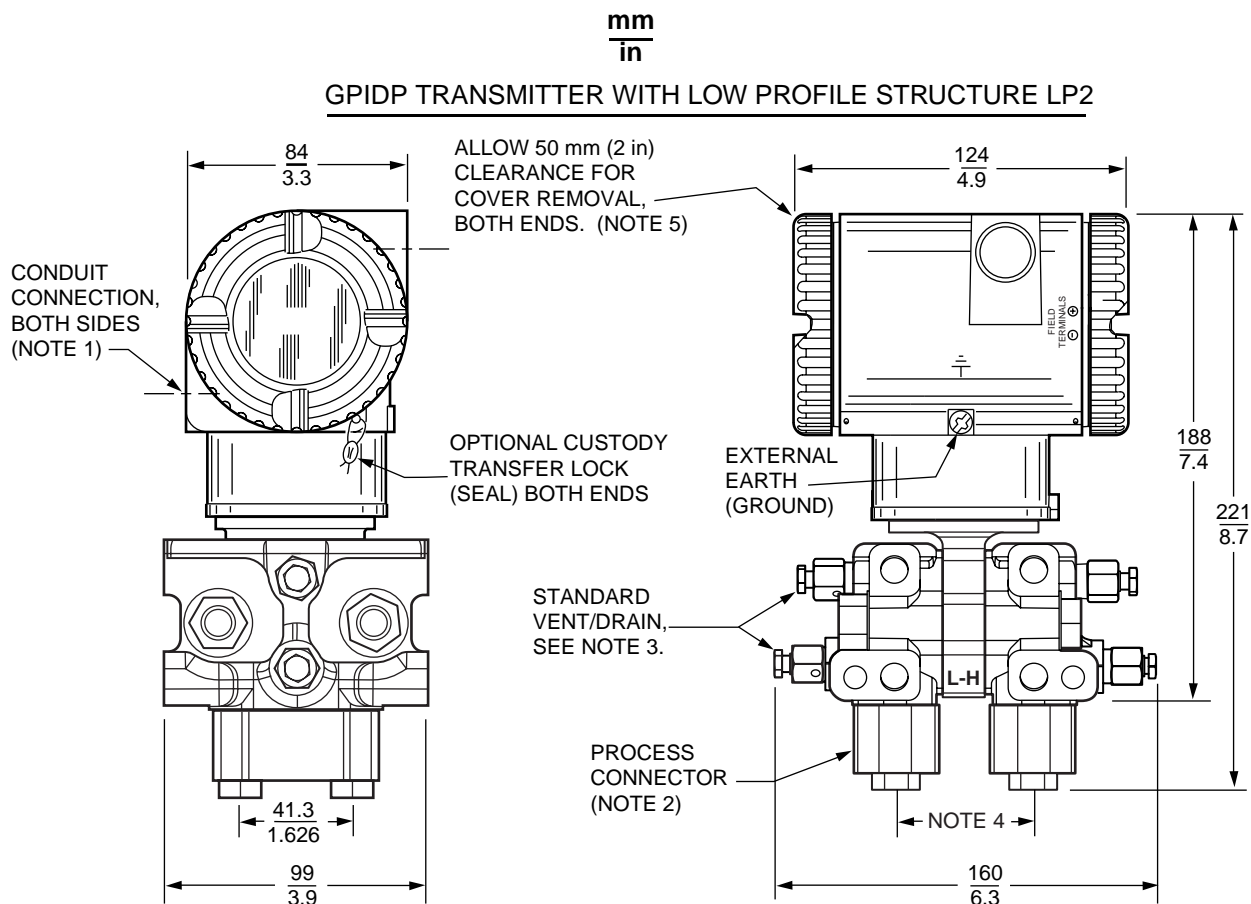
GPIDP TRANSMITTER WITH LOW PROFILE STRUCTURE LP1



NOTES:

1. CONDUIT CONNECTION 1/2 NPT, PG 13.5, OR M20, BOTH SIDES: PLUG UNUSED CONNECTION WITH METAL PLUG (SUPPLIED).
2. PROCESS CONNECTORS MAY BE REMOVED AND TRANSMITTER MOUNTED DIRECTLY ON A MANIFOLD, OR CONNECTIONS MADE DIRECTLY TO PROCESS COVER USING 1/4 NPT INTERNAL THREAD IN PROCESS COVER.
3. THE TRANSMITTER'S LOW PROFILE STRUCTURE LP1 IS SHOWN IN THE VERTICALLY UPRIGHT POSITION. NOTE THE LOCATION OF THE STANDARD VENT/DRAIN SCREW. IN THIS CONFIGURATION THE TRANSMITTER CAN BE VENTED OR IS SELF-DRAINING. ALSO RECOMMENDED IS A HORIZONTAL INSTALLATION WHERE THE INSTALLED ORIENTATION CAN BE SET TO ALLOW FOR VENTING OR DRAINING.
4. PROCESS CONNECTORS CAN BE INVERTED TO GIVE EITHER 51, 54, OR 57 mm (2.0, 2.125, OR 2.25 in) CENTER-TO-CENTER DISTANCE BETWEEN HIGH AND LOW PRESSURE CONNECTIONS.
5. TOPWORKS CAN BE ROTATED TO ANY POSITION WITHIN ONE TURN COUNTERCLOCKWISE OF THE FULLY TIGHTENED POSITION.

DIMENSIONS-NOMINAL (Cont.)



NOTES:

1. CONDUIT CONNECTION 1/2 NPT, PG 13.5, OR M20, BOTH SIDES: PLUG UNUSED CONNECTION WITH METAL PLUG (SUPPLIED).
2. PROCESS CONNECTORS MAY BE REMOVED AND TRANSMITTER MOUNTED DIRECTLY ON A MANIFOLD, OR CONNECTIONS MADE DIRECTLY TO PROCESS COVER USING 1/4 NPT INTERNAL THREAD IN PROCESS COVER.
3. THE TRANSMITTER'S LOW PROFILE STRUCTURE LP2 IS SHOWN IN THE RECOMMENDED VERTICAL UPRIGHT POSITION. NOTE THE STANDARD VENT OR DRAIN SCREWS. HORIZONTAL INSTALLATIONS ARE NOT RECOMMENDED.
4. PROCESS CONNECTORS CAN BE INVERTED TO GIVE EITHER 51, 54, OR 57 mm (2.0, 2.125, OR 2.25 in) CENTER-TO-CENTER DISTANCE BETWEEN HIGH AND LOW PRESSURE CONNECTIONS.
5. TOPWORKS CAN BE ROTATED TO ANY POSITION WITHIN ONE TURN COUNTERCLOCKWISE OF THE FULLY TIGHTENED POSITION.