

Series GT16XX

Industrial Pressure Transducers / Pressure Transmitters



Description

The Series GT16XX pressure transducers and pressure transmitters combine high 0.10% static accuracy with high level outputs. Customers can select 4-20 mA current outputs, numerous voltage outputs, as well as digital outputs including RS232, RS485, and CANbus. The GT16XX pressure transducers offer isolated voltage output as standard for the voltage outputs units. Zero and span adjustment pots are standard features. Each of these pressure sensors is constructed of all welded stainless steel. All GT16XX transducers are manufactured to be shock and vibration resistant. Pressure ranges extend to 40,000 psi and are available in absolute or gage references. A comprehensive selection of options, including pressure ports, electrical terminations, temperature compensation ranges, and media materials are also available. Each unit is shipped with a 19 point calibration record traceable to NIST as standard.

Standard Features

- $\pm 0.10\%$ FSO Accuracy
- High Level Output (Analog & Digital)
- Zero and Span Adjustments
- Isolated Voltage Output (For Voltage Output Units)
- Improved Thermal Performance
- Pressure Ranges to 40,000 psi
- Stainless Steel Construction
- Secondary Containment
- Shock and Vibration Resistant
- 19 Point Calibration Record Traceable to NIST
- Many Ranges in Stock for Immediate Delivery

Optional Features

- Customer Specified Electrical Connections
- Customer Specified Pressure Ports
- Wetted Material Alternatives
- Extended Temperature Compensation Ranges
- Special Calibrations

GT16XX

Series GT16XX Specifications

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below
Custom Designs Available

Performance

Static Accuracy

± 0.1% FSO by BFSL.

Resolution

Analog: Infinite.

Digital: .025% FSO.

Thermal Zero Shift

< ± 0.005% FSO/°F (typical).

Thermal Span Shift

< ± 0.005% FSO/°F (typical).

Zero Balance

±1% FSO at 70°F.

Zero Adjustment: ±5% FSO.

Span

± 1% FSO at 70°F.

Span Adjustment: ±5% FSO.

Frequency Response

Consult Factory.

Mechanical Characteristics

Standard Ranges

0 - 5, 10, 25, 30, 50, 75, 100, 200, 500, 750, 1000, 1500, 2000, 3000, 5000, 7500, 10000, 15000, 20000, 25000, 30000, 40000 PSIA / PSIG.

Proof Pressure

1.5 X range.

Burst Pressure

2.0 X range.

Operating Media

Liquids and gases compatible with

17-4 stainless steel.

Inconel and other materials optional.

Enclosure

Body of stainless steel.

Pressure Fitting

(For ranges 5 psi thru 10,000 psi).

1/4" NPT Female (Standard)

1/4" NPT Male (No charge option).

(For ranges 15,000 psi thru 40,000 psi)

AE F250-C, 9/16"-18 UNF, or equivalent (Standard).

For additional pressure fittings please consult factory.

Secondary Containment

4500 PSI (Standard).

10000 PSI (Optional).

Weight

Approximately 16 oz.

Electrical Characteristics

ANALOG OUTPUTS

Excitation

4-20mA Current Loop:

9-36 Vdc for 2-wire.

9-36 Vdc for 3-wire.

Isolated Voltage Output (0-5 Vdc, 0-10 Vdc):

14-32 Vdc (standard).

8-18 Vdc (No charge option).

Non-Isolated Voltage Output:

8-40 Vdc for 1-5 Vdc, 3-wire (standard).

8-40 Vdc for 1-6 Vdc, 3-wire (No charge option).

8-40 Vdc for 0-5 Vdc, 4-wire (No charge option).

Additional outputs and related excitations available.

DIGITAL OUTPUTS

Excitation

RS-232, RS-485, CANbus

8-30 Vdc.

Programming

PC. (There are no zero and span pots.

Zero and span adjustments can be made using software.)

DUAL OUTPUTS (Analog & Digital)

Excitation

3-wire Current plus Digital:

12-32 Vdc.

Isolated Voltage plus Digital:

14-32 Vdc.

Non-Isolated Voltage plus Digital:

8-30 Vdc.

COMMON

Insulation Resistance

> 100 megohms at 50 Vdc at 70°F.

Electrical Termination

PTIH-10-6P stainless steel connector or equivalent.

Optional electrical terminations available.

Electrical Protection

- EMI Protected. (Optional for Isolated Voltage).
- Surge Protection to 500 Vdc. (Optional for Isolated Voltage).
- Reverse polarity protected.
- Short circuit protected.

Environmental Characteristics

Compensated Temperature Range

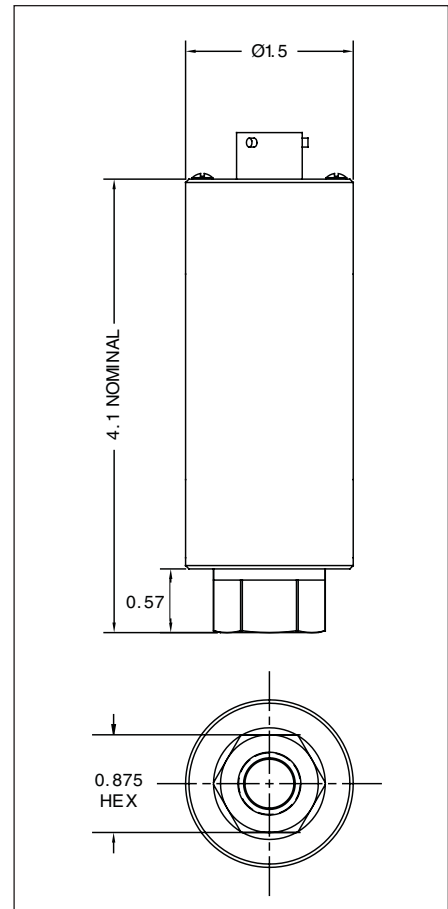
-30°F to +170°F. Options available.

Operating Temperature Range

-65°F to +250°F.

(Note: Maximum Operating Temperature for digital output is +185°F)

Dimensions (inches)



MODEL IDENTIFICATION

G	T	1	6	X	X
SERIES					
		ANALOG OUTPUT		DIGITAL OUTPUT	
		0 = Isolated Voltage		0 = None	
		1 = None		1 = RS-485	
		2 = Non-Isolated Voltage		2 = RS-232	
		5 = 4-20 mA 2-wire Loop (not available with Digital Output)		4 = CANbus	
		6 = 4-20 mA 3-wire			



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MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.

WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

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Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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