

Series GT18XX

Industrial Pressure Transducers / Pressure Transmitters



Description

The Series GT18XX pressure transducers and pressure transmitters provide an economical solution for many general purpose industrial applications requiring high level outputs. This family of pressure transducers provides a variety of electrical outputs including 4-20 mA current, standard voltage outputs, as well as digital outputs including RS232, RS485, and CANbus. The GT18XX sensors offer isolated voltage output as a standard feature. These 0.25% accuracy pressure transducers have a maximum range of 40,000 psi and are available in both gage or absolute references. All GT18XX products are constructed of stainless steel and are manufactured to be shock and vibration resistant. A comprehensive selection of pressure ports and electrical terminations is available. Each unit is shipped with a 15 point calibration record traceable to NIST as standard.

Standard Features

- $\pm 0.25\%$ FSO Accuracy
- High Level Output (Analog & Digital)
- Isolated Voltage Output (For Voltage Output Units)
- Pressure Ranges to 40,000 psi
- Stainless Steel Construction
- Shock and Vibration Resistant
- 15 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
- Zero and Span Adjustment Pots
- Extended Temperature Compensation Ranges
- Special Calibrations

GT18XX

Series GT18XX Specifications

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

Performance

Static Accuracy

± 0.25% FSO by BFSL.

Resolution

Analog: Infinite.
Digital: .025% FSO.

Thermal Error

< ± 0.020% FS/°F (typical).

Zero Balance

± 1% FSO at 70°F.

Span

± 1% FSO at 70°F.

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 and 30000, 40000 PSIA / PSIG.

Proof Pressure

1.5 X range.

Burst Pressure

2.0X range.

Operating Media

Fluids 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 Male (Standard).

1/4" NPT Female (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.

Weight

Approximately 8 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
8-30 Vdc.
CANbus
4-18 Vdc (standard).
14-32 Vdc (optional).

Programming

PC.

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

3 ft. of PVC cable with shield and drain wire. 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

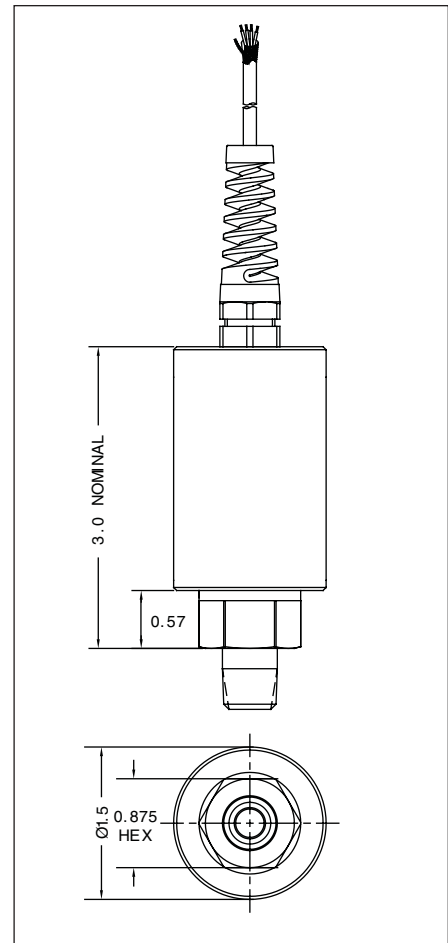
Compensated Temperature Range

+30°F to +130°F. Options available.

Operating Temperature Range

-40°F to +185°F.

Dimensions (inches)



MODEL IDENTIFICATION

G	T	1	8	X	X
SERIES					
ANALOG OUTPUT		DIGITAL OUTPUT			
0 = Isolated Voltage		0 = None		1 = RS-485	
1 = None		2 = Non-Isolated Voltage		2 = RS-232	
2 = 4-20 mA 2-wire Loop (not available with Digital Output)		5 = 4-20 mA 3-wire		4 = CANbus	
3 = 4-20 mA 3-wire		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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