Series GT32XX

High Pressure, Fatigue Rated Pressure Transducers

GT32XX

Description

The Series GT32XX pressure transducers and pressure transmitters are designed to meet the needs of customer applications requiring pressures to 100,000 psi or high cycle rates for pressures ranging from 20,000 psi to 50,000 psi. This series 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 GT32XX pressure sensors offer isolated voltage output as a standard feature. These 0.25% accuracy pressure transducers are excellent pressure sensor solutions for homogenizing, fuel injection testing, water jet cutting, hot/cold isostatic powder press, and metal injection molding applications. All GT32XX 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

- **Pressure Ranges To 100,000 psi**
- **Fatigue Rated**
- **High Level Output (Analog & Digital)**
- **± 0.25% FSO Accuracy**
- **Zero Pot Adjustment**
- **Isolated Voltage Output (For Voltage Output Units)**
- **Stainless Steel Construction**
- **Shock and Vibration Resistant**
- **15 Point Calibration Record Traceable to NIST**

Optional Features

- **Customer Specified Electrical Connections**
- **Span Adjustment Pot**
- **Extended Temperature Compensation Ranges**
- **Special Calibrations**

Your Application-Solution Source℠

Series GT32XX
Specifications

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

Performance

Static Accuracy
± 0.25% FSO by BFSL.
(± 0.5% FSO by BFSL for 100000 PSIA / PSIG).

Resolution
Analog: Infinite.
Digital: .025% FSO.

Thermal Error
< ± 0.020% FSO/°F. (typical)

Span
± 1% FSO at 70°F.

Zero Balance
±1% FSO at 70°F.
Zero Adjustment: ±5% FSO

Mechanical Characteristics

Standard Ranges
20,000, 30,000, 40,000, 50,000, 60,000, 75,000, 100,000 PSIA / PSIG.

Proof Pressure
1.5 X range.

Burst Pressure
2.0 X range.

Operating Media
Liquids and gases compatible with stainless steel.

Enclosure
Body of stainless steel.

Pressure Fitting
(For ranges 20,000 psi thru 60,000 psi).
AE F250-C, 9/16"-18 UNF, or equivalent (Standard)
(For ranges 75,000 psi thru 100,000 psi).
AE F312-C150, 5/8"-18 UNF, or equivalent Female (Standard)
For additional pressure fittings please consult factory.

Weight
Approximately 12 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 is no zero pot. Zero adjustment 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.

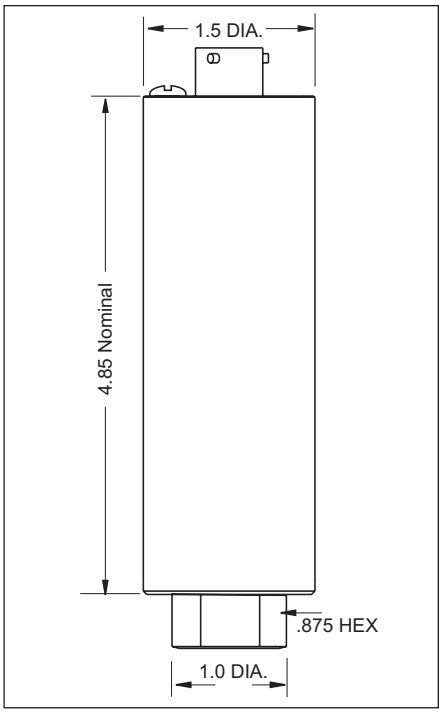
COMMON

Insulation Resistance
> 100 megohms at 50 Vdc at 70°F.

Electrical Termination
PTIH-10-6P (202031) stainless steel connector mates with MS3116-10-6S 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.

Dimensions (inches)



MODEL IDENTIFICATION

G	T	3	2	X	X
	SERIES		ANALOG OUTPUT		DIGITAL OUTPUT

ANALOG OUTPUT
0 = Isolated Voltage
1 = None
2 = Non-Isolated Voltage
5 = 4-20 mA 2-wire Loop (not available with Digital Output)
6 = 4-20 mA 3-wire

DIGITAL OUTPUT
0 = None
1 = RS-485
2 = RS-232
4 = CANbus

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)

CE
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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.

Find More Information at: stellartech.com

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

ISO 9001

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