

Series FT11XX

Miniature Flush Diaphragm Pressure Transducers



Description

The FT11XX is an extremely small, accurate and reliable flush diaphragm pressure transducer. Rugged, long-lived, robust bonded foil strain gage technology is employed to provide static and dynamic pressure measurement. Additionally, the unit provides a low sensitivity to shock and vibration, infinite resolution, and excellent transient response times through a wide temperature range.

The standard unit provides either 1-5 Vdc or 4-20 mA output. As with all of STI's products, this unit offers many mechanical adaptations which compliment STI's "Application-Solutions" to meet the demands of today's marketplace. The brief specifications listed on the back are but a few of the more important parameters of interest. Make sure to contact the sales office closest to you for further definition.

Standard Features

- Stainless steel construction
- Flush diaphragm
- 0-100 through 0-5000 PSI ranges
- 1-5 Vdc, 4-20 mA
- Compact size

Optional Features

- Teflon® coating
- Alternative electrical terminations
- 1-6 Vdc output
- 316L ss sensor

FT11XX

Series FT11XX Specifications

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

Performance

Static Accuracy

± 0.50% FSO by BFSL.

Resolution

Infinite

Thermal Error

< ± 0.030% FSO/°F typical.

Zero Balance

±5% FSO at 70°F.

Span

± 1% FSO at 70°F.

Mechanical Characteristics

Standard Ranges

0-100, 200, 500, 1000, 3000, 5000 PSIG.

Proof Pressure

1.5 times FSO range minimum.

Burst Pressure

3.0 times FSO range minimum.

Operating Media

Fluids and gases compatible with stainless steel. Inconel and other materials optional.

Enclosure

Body and pressure cavity of stainless steel.

Pressure Fitting

0.5 inches flush.

Weight

Approximately .45 ounces.

Environmental Characteristics

Compensated Temperature Range

30°F to 130°F.

Optional temperature compensation, consult factory.

Operating Temperature Range

-30°F to +180°F., amplified output.

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. Please consult factory.

DIGITAL OUTPUTS

Excitation

RS-232, RS-485, CANbus.

8-30 Vdc.

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.

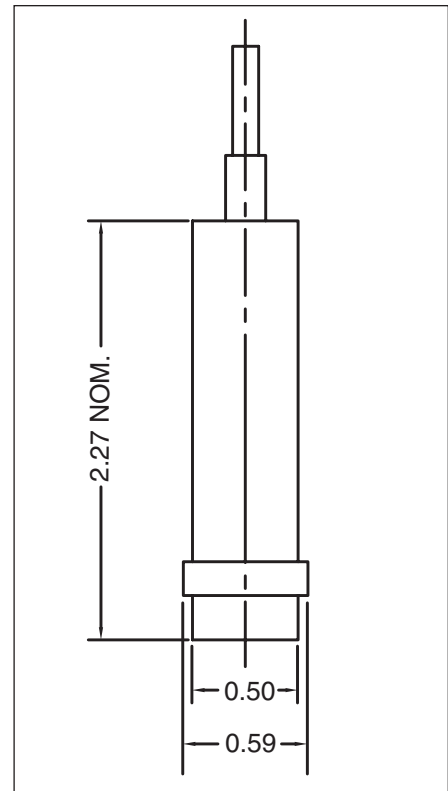
Electrical Termination

3 ft. cable, Teflon wrap with shield.

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

F	T	1	1	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.

Find More Information at:
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Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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