



Series FT110

Miniature Flush Diaphragm Pressure Transducers



Description

The FT110 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 a 1-2 mV/V 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
- Ranges to 5K
- mV/V output
- Compact size

Optional Features

- Teflon® coating
- Alternative electrical terminations
- Alternate materials of construction
- Customer specified pressure port

Series FT110

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.

Input/Output Resistance

350 ±20 ohms at 70°F.

Insulation Resistance

Greater than 10K megaohms at 50 Vdc at 70°F.

Zero Balance

±3% FSO at 70°F.

Output Signal

1-2 mV/V of excitation @ 70°F.

Frequency Response

Consult Factory.

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 of stainless steel.

Pressure Fitting

0.5 inches flush.

Weight

Approximately .45 ounces.

Electrical Characteristics

Excitation

10 Vdc recommended, 15 Vdc maximum.

Electrical Termination

3' cable, Teflon wrap with shield.

Input/Output Resistance

350 ±20 ohms at 70°F.

Insulation Resistance

Greater than 10K megaohms at 50 Vdc at 70°F.

Environmental Characteristics

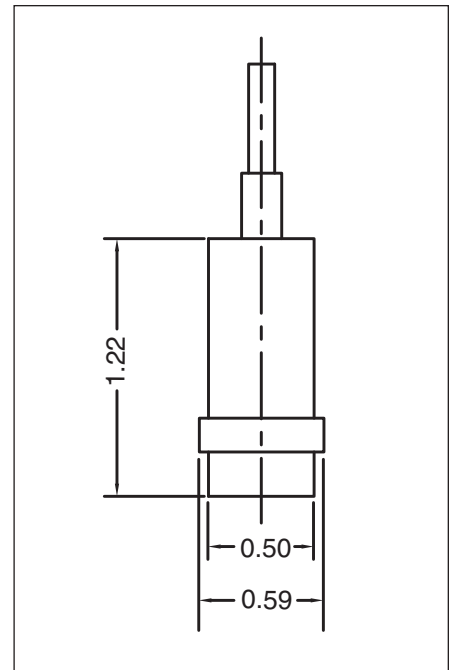
Compensated Temperature Range

+30°F to +130°F. Options available.

Operating Temperature Range

-100°F to +300°F. Options available.

Dimensions (inches)



CE

Modifications and Warranty

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.



ISO 9001/AS9100

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

237 Commerce Drive • Amherst, NY 14228 • USA

Tel: 716.250.1900 • Fax: 716.250.1909

Web: stellartech.com • Email: info@stellartech.com

Copyright © 2015 STI • All Rights Reserved
Datasheet P/N: 227283D DCN 13406