

Series FT290

Flush Diaphragm Pressure Transducers



Description

The Series FT290 pressure transducers are designed for those applications requiring both a standard NPT male process connection and a flush diaphragm with zero dead volume. These pressure sensors are designed with a unique isolation diaphragm which reduces stress levels caused by torquing a tapered thread into the mating fitting. Besides their small size, these pressure sensors are constructed of all welded stainless steel and can withstand very demanding application environments. Additional design features include low sensitivity to shock and vibration, and infinite resolution. The compact size of the Series FT290 pressure transducer makes it ideal for many metering and dispensing applications. Standard units are designed with 1/4" NPTM pressure fittings; optional sizes are available. Each unit is shipped with a 15 point calibration record traceable to NIST as standard.

Standard Features

- Flush Diaphragm (Zero Dead Volume)
- Flush Diaphragm Insensitive to Torque
- Standard NPTM Process Connection
- Compact Size
- 3 mV/V Output
- Pressure Ranges from 2,000 psig to 10,000 psig
- All Stainless Steel Construction
- Shock and Vibration Resistant
- 15 Point Calibration Record Traceable to NIST

Optional Features

- Optional NPTM Sizes
- Customer Specified Electrical Termination
- Special Calibrations
- Special Materials

FT290

Series FT290 Specifications

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

Performance

Static Accuracy

± 0.25% FSO by BFSL.

Resolution

Infinite

Thermal Error

< ± 0.020% FSO/°F.

Zero Balance

±1% FSO at 70°F.

Full Scale Output

3.0 ± 0.015 mV/V FSO at 70°F.

Frequency Response

Consult Factory.

Mechanical Characteristics

Standard Ranges

0 - 2000, 3000, 5000, 7500 and 10000
PSIA / PSIG.

Proof Pressure

1.5 X FSO range.

Burst Pressure

3.0 X FSO range.

Operating Media

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

Enclosure

Body of stainless steel.

Pressure Fitting

1/4" NPT male (standard). Optional NPTM pressure fittings available (consult factory).

Weight

Approximately 3.5 ounces.

Electrical Characteristics

Excitation

10 Vdc recommended, 15 Vdc maximum.

Insulation Resistance

> 10K megaohms at 50 Vdc at 70°F.

Input/Output Resistance

350 ±20 ohms at 70°F.

Electrical Termination

PTIH-10-6P stainless steel connector or equivalent. Optional electrical terminations available.

Environmental Characteristics

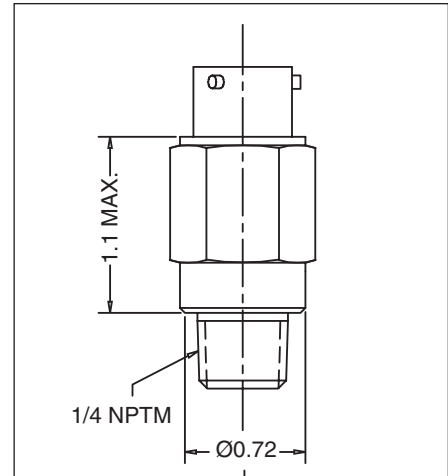
Compensated Temperature Range

-65°F to +250°F. Options available.

Operating Temperature Range

-100°F to +300°F. Options available.

Dimensions (inches)



CE
0539

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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