

Series T750

Temperature Sensors

T750



Description

The T750 series is a temperature sensor for measuring dynamic and static temperatures under pressure. The unit is entirely welded and utilizes stainless steel and heavy wall tubing to reduce the need for thermowells, thus, minimizing costs and improving space efficiency.

The unit provides many features as standard and allows for a wide variety of high level outputs along with many other electrical and mechanical modifications. As with all of STI's products, "state-of-the-art" electronics are coupled with rugged and durable RTD elements.

The unit provides a versatile, easy to use, economical solution and compliments the "Application-Solutions" demanded by today's marketplace.

Areas of applications where we can assist include:

- Submersible Applications
- Oilfield Drilling/Production Applications
- Hazardous Areas
- OEM Customization
- Plant Automation

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. In most cases, independent data sheets support these applications and provide additional information.

Standard Features

- Stainless Steel Construction
- NIST Traceable Calibration
- Wide Variety of Analog and Digital Outputs
- Hermetically Sealed
- Probe Length to 6 inches

Optional Features

- Remote Operation
- Submersible Operation
- Special Ranges
- Low Current Draw Electronics
- Area Certifications for I.S. and Flameproof Environments

Your "Application-SolutionSM" Source

Series T750 Specifications

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below

Performance

Temperature Accuracy

± 1.2°F or 1% or
± 0.6°F. or .5% (optional)

Frequency Response

Thin wall probe: 1 sec. in liquid (63%).
Standard probe: 3 sec. in liquid (63%).

Insulation Resistance

> 100 megohms at 50 Vdc at 70°F.

Mechanical Characteristics

Working Pressure

10,000 PSI maximum.

Operating Media

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

Pressure Fitting

1/4" NPT male.
7/16"-20 per MS33656-4 (Male).

Enclosure

Body and pressure cavity of stainless steel, hermetically sealed.

RTD

Specify probe length desired:
Dimension "L" (see drawing).

Standard length: .375" minimum.

Weight

8 oz. maximum.

Electrical Characteristics

ANALOG OUTPUTS

Excitation

4-20mA Current Loop:
2-wire 9-36 Vdc unregulated.
3-wire 14-40 Vdc unregulated.

Isolated Voltage Output:

8-18 Vdc or 14-32 Vdc unregulated.

Non-Isolated Voltage Output:

8-40 Vdc unregulated.
3 or 4 wire available.

DIGITAL OUTPUTS

Excitation

RS-232, RS-485, CANbus
8-30 Vdc unregulated.

Programming

PC.

COMMON

Electrical Termination

Stainless steel to mate with a
PT06-10-6S (MS3116-10-6S).

Electrical Protection

- EMI/RFI protected.
- Surge protection to 500 Vdc.
- Reverse polarity protected.
- Short circuit protected

Environmental Characteristics

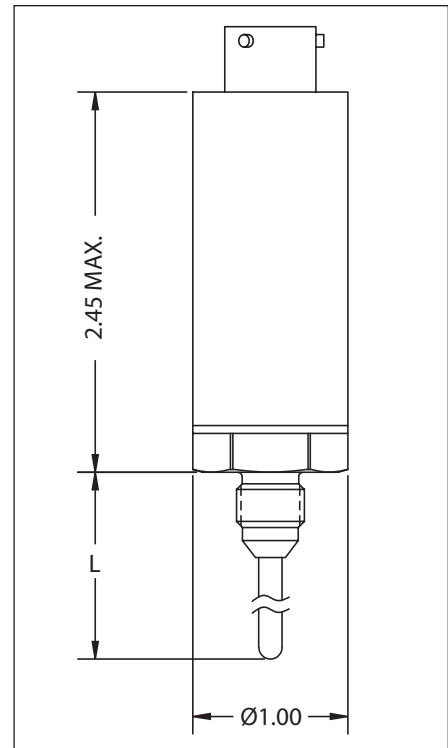
Electronics Case

Analog: -65°F to +250°F.
Digital: -40°F to +185°F.

Temperature Probe

-320°F to +500°F.

Dimensions (inches)



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. See accessory listing for additional choices.

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.

Ordering Information

Contact the factory or your Authorized
Stellar Technology, Inc. Representative.

Represented By:

Stellar Technology Incorporated is an
ISO 9001:2000
Registered Company



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

