



# 5 VDC OUTPUT PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

## ETM/T-712-562 SERIES

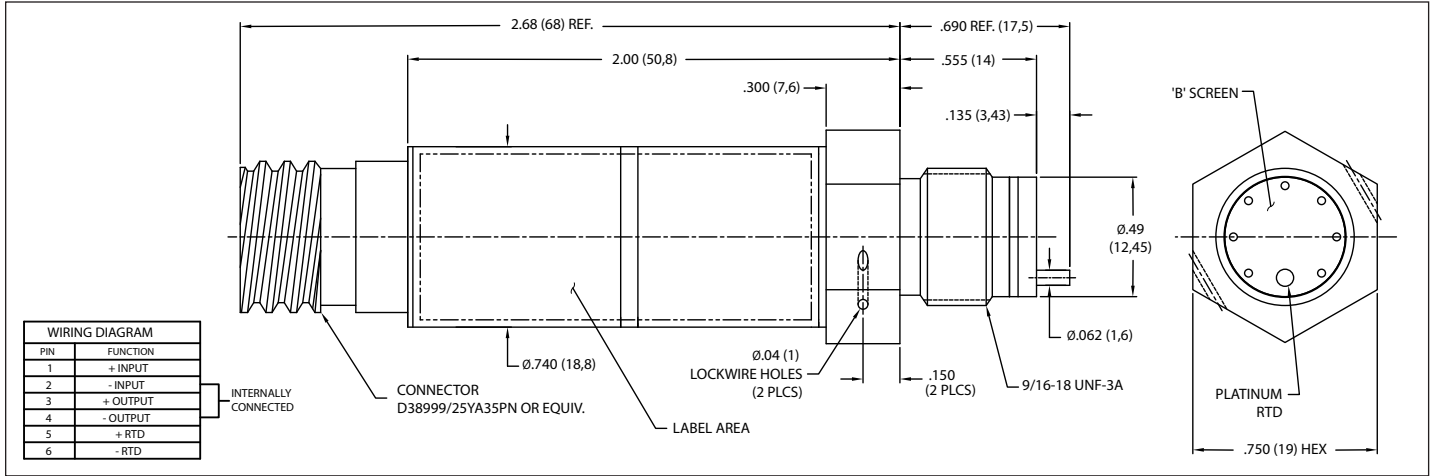
- Combined Pressure & Temperature Capabilities
- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- All Welded Construction
- Hermetic Sealed Package
- Aerospace Quality Components
- Intrinsically Safe Applications Available (i.e. IS-ETM/T-712-562)



The ETM/T-712-562 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply.

The ETM/T-712-562 utilizes a flush metal diaphragm as a force collector. A solid state piezoresistive sensing element is located immediately behind this metal diaphragm which is protected by a metal screen. Force transfer is accomplished via an intervening film of non-compressible silicone oil. This sensing sub assembly is welded to a stainless steel body.

This advanced construction results in a highly stable, reliable and rugged instrument with all the advantages of microcircuitry: significant miniaturization, excellent repeatability, low power consumption, etc. The miniaturization process also yields a marked increase in the natural frequencies of the transducers, making them suitable for use even in shock pressure measurements. Incorporation of a Kulite proprietary electronics module within the main body of this product allows for operation from an unregulated power supply of 16 to 32 VDC. Standard output is a stable, low noise 0.25 to 5 VDC signal.



INPUT	Pressure Range	7 100	17 250	35 500	70 1000	140 2000	210 3000	350 BAR 5000 PSI	
	Operational Mode	Absolute, Sealed Gage							
	Over Pressure	2 Times Rated Pressure to a Max. of 8000 PSI (552 BAR)							
	Burst Pressure	3 Times Rated Pressure to a Max. of 8000 PSI (552 BAR)							
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH and 316 Stainless Steel							
	Rated Electrical Excitation	16 to 32 VDC							
OUTPUT	Maximum Electrical Current	25 mA							
	Output Impedance	200 Ohms (Max.)							
	Full Scale Reading	5 VDC							
	RTD	1000 Ohms Platinum, DIN EN 60751 Tables. Class A (65% Response Time 3 Seconds Max.) In Liquid							
	Bandwidth (-3dB)	DC to 5 KHz							
	Residual Unbalance	250 mV							
ENVIRONMENTAL	Resolution	Infinitesimal							
	Insulation Resistance	100 Megohm Min. @ 50 VDC							
	Operating Temperature Range	-65°F to +275°F (-55°C to +135°C)							
	Compensated Temperature Range	-65°F to +250°F (-55°C to +120°C)							
	Total Error Band	± 2% FSO +32°F to 180°F (0°C to +85°C) Increasing to ± 3% At All Other Temperatures Within The Compensated Range (TEB Includes: Non-linearity, Non-repeatability, Hysteresis, End Point Settings, Temperature Effects on Zero and Span Within the Compensated Range)							
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz							
PHYSICAL	Altitude	Unaffected							
	Humidity	100% Relative Humidity							
	Mechanical Shock	20g half Sine Wave 11 msec. Duration							
	Electrical Connection	D38999/25YA35PN Connector or Equivalent							
	Weight	80 Grams (Max.)							
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							
Mounting Torque	80 Inch-Pounds (Max.)								

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2023 Kulite Semiconductor Products, Inc. All Rights Reserved.