

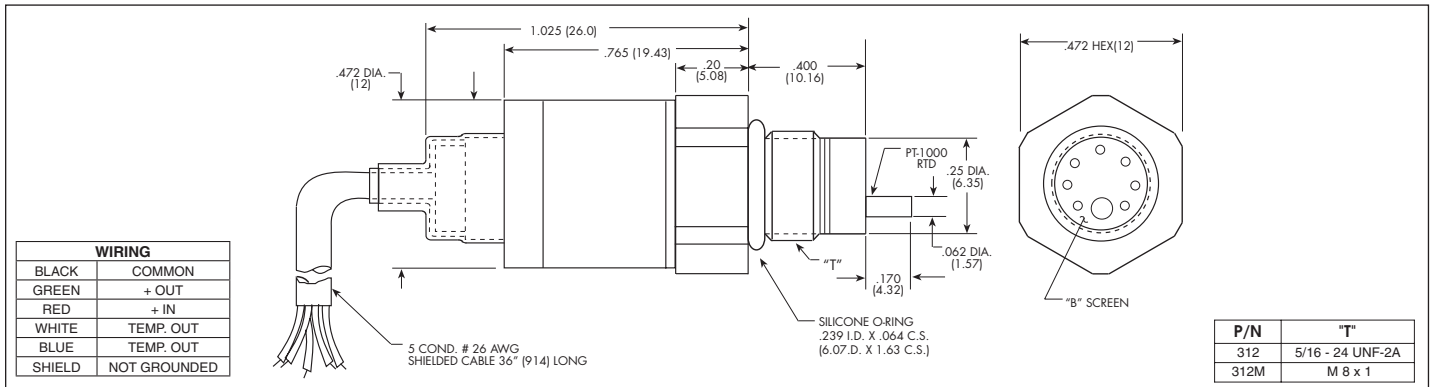


# ULTRAMINIATURE 5V OUTPUT HIGH TEMPERATURE PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

## ETL/T-312 (M) SERIES

- Combined Pressure and Temperature Capability
- Robust Construction
- Excellent Long Term Stability
- Patented Leadless Technology VIS®
- Designed For Industrial And Automotive Applications

The ETL/T-312 is a miniature threaded pressure transducer/platinum RTD combination. The pressure transducer utilizes a patented silicon on silicon design. The platinum RTD protrudes beside the diaphragm to sense media temperature. The pressure and temperature devices are designed to operate independently. All wetted parts of the transducer are compatible with most automotive fluids.



INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	250 BAR 3600 PSI
	Operational Mode	Absolute		Absolute, Sealed Gage							
	Over Pressure	2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 5000 PSI (350 BAR)									
	Burst Pressure	3 Times Rated Pressure to a Max. of 5000 PSI (350 BAR)									
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Supplied)									
	Maximum Electrical Current	25 mA									
	Rated Electrical Excitation	12 ± 4 VDC									
OUTPUT	RTD Excitation	1mA (2mA Max.)									
	Full Scale Reading	5 VDC ± 75mV (3 Wire System Single Ended Output)									
	Residual Unbalance	0.5V ± 75mV									
	Output Impedance	200 Ohms (Nom.)									
	RTD	1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) in Liquid									
	Bandwidth (-3dB)	DC to 3000 Hz									
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.)									
	Resolution	Infinitesimal									
	Acceleration Sensitivity % FS/g Perpendicular	1.0x10 <sup>-3</sup>	6.5x10 <sup>-4</sup>	5.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>	4.0x10 <sup>-5</sup>	2.5x10 <sup>-5</sup>	1.7x10 <sup>-5</sup>
	Insulation Resistance	100 Megohm Min. @ 50 VDC									
ENVIRONMENTAL	Operating Temperature Range	-20°F to +375°F (-29°C to +190°C)									
	Compensated Temperature Range	-20°F to +350°F (-29°C to +175°C)									
	Thermal Zero Shift	± 1% FS/100°F (Typ.)									
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)									
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)									
PHYSICAL	Mechanical Shock	20g half Sine Wave 11 msec. Duration									
	Electrical Connection	5 Conductor 26 AWG Shielded Cable 36" Long									
	Weight	15 Grams Excluding Cable									
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology									
Mounting Torque	50 Inch-Pounds (Max.) 6Nm										

Note: Custom pressure ranges, accuracies, mechanical configurations and RTD resistance available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.

Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (H)

Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.