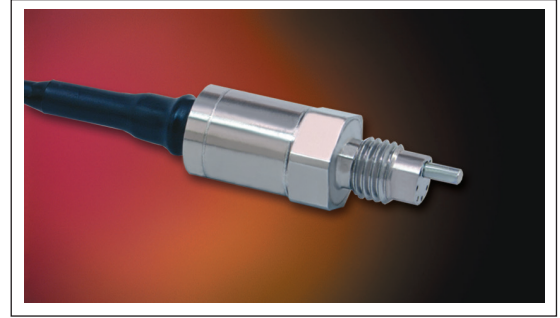




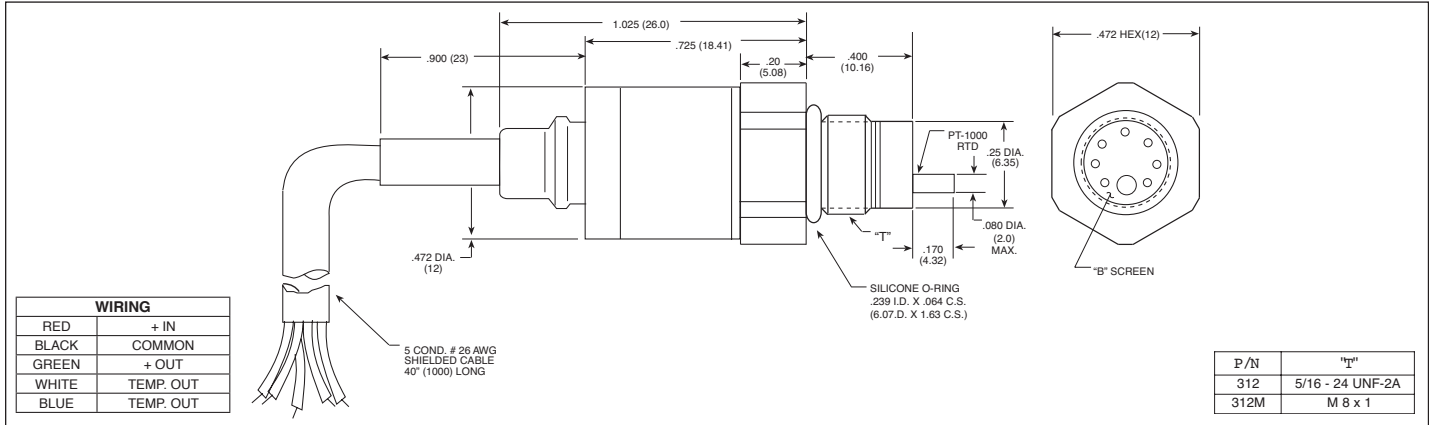
# ULTRAMINIATURE 5V OUTPUT HIGH TEMPERATURE PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

## 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. Part performance not guaranteed if used in water.



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	350 BAR 5075 PSI	
	Operational Mode	Absolute		Absolute, Sealed Gage								
	Over Pressure	2 Times Rated Pressure									1.5 Times Rated Pressure	
	Burst Pressure	3 Times Rated Pressure									2 Times Rated Pressure	
	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										
	RTD Excitation	0.3mA (1mA Max.)										
	Full Scale Reading	4.5V ± 1.5% (3 Wire System Single Ended Output)										
	Residual Unbalance	0.5V ± 75mV										
OUTPUT	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.), ± 0.25% 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>	1.5x10 <sup>-5</sup>	
ENVIRONMENTAL	Insulation Resistance	100 Megohm Min. @ 50 VDC										
	Operating Temperature Range	-20°F to +365°F (-29°C to +185°C)										
	Compensated Temperature Range	+68°F to +350°F (+20°C to +175°C)										
	Total Error Band (Excluding End Points)	± 2% FS/100°C ≤ 217.5 PSI (15 BAR), ± 1% FS/100°C > 217.5 PSI (15 BAR)										
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz										
PHYSICAL	Mechanical Shock	20g Half Sine Wave 11 msec. Duration										
	Electrical Connection	5 Conductor 26 AWG Shielded Cable 40" (1000) 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. All dimensions nominal. (N) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved. 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.