

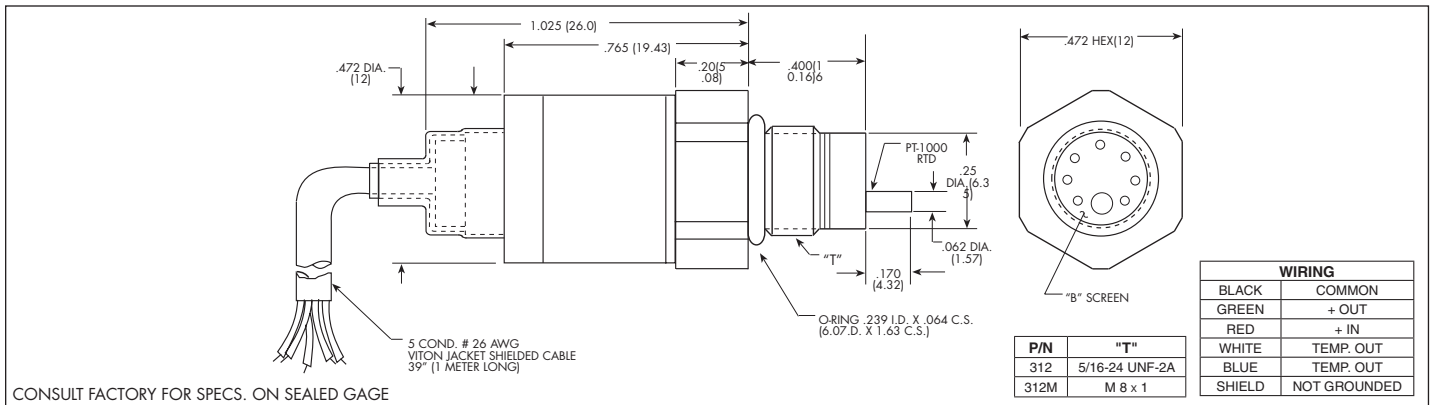
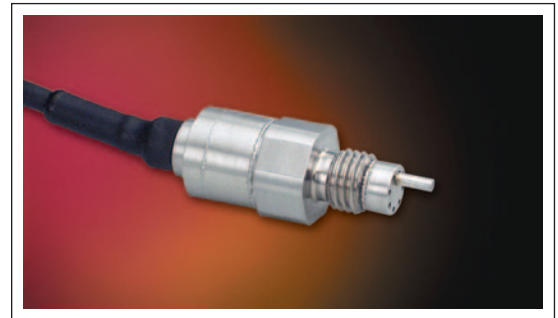


# ULTRAMINIATURE 5V OUTPUT HIGH TEMPERATURE IS<sup>®</sup> PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

## ETL/T-312 (M) SERIES

- Combined Pressure and Temperature Capability
- Robust Construction
- Excellent Long Term Stability
- Patented Leadless Technology VIS<sup>®</sup>

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 aircraft and automotive fluids.



<b>INPUT</b>	1.7	3.5	7	17	35	70	170	250 BAR
Pressure Range	25	50	100	250	500	1000	2500	3600 PSI
Operational Mode	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 6000 PSI (420 BAR)							
Burst Pressure	3 Times Rated Pressure							
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)							
Maximum Electrical Current	25 mA							
Rated Electrical Excitation	12 ± 4 VDC				28 ± 4 VDC			
<b>OUTPUT</b>	5 VDC ± 75mV (3 Wire System Single Ended Output)				5 VDC ± 75mV or 10 VDC ± 150mV (3 Wire System Single Ended Output)			
Full Scale Reading								
Output Impedance	200 Ohms (Nom.)							
RTD	1000 Ohms Platinum, DIN EN 60751 Tables (65% Response Time 3 Seconds Max.)							
Bandwidth (-3dB)	DC to 3000 Hz							
Residual Unbalance	0.5V ± 75mV							
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.)							
Resolution	Infinitesimal							
Acceleration Sensitivity % FS/g Perpendicular	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>
Transverse	6.0x10 <sup>-5</sup>	4.0x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	1.0x10 <sup>-5</sup>	6.0x10 <sup>-6</sup>	4.0x10 <sup>-6</sup>	2.2x10 <sup>-6</sup>	1.8x10 <sup>-6</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC							
<b>ENVIRONMENTAL</b>								
Operating Temperature Range	-65°F to +375°F (-55°C to +190°C)							
Compensated Temperature Range	-65°F to +350°F (-55°C to +175°C)							
Thermal Zero Shift	± 1% FS/100°F (Typ.)							
Thermal Sensitivity Shift	± 1% /100°F (Typ.)							
Steady Acceleration and Linear Vibration	100g Peak, Sine up to 5000 Hz							
Humidity	100% Relative Humidity							
Mechanical Shock	100g 11 msec. 10,000g. 100µ sec.							
<b>PHYSICAL</b>								
Electrical Connection	5 Conductor 26 AWG Viton Jacket Shielded Cable (or Equivalent) 39" (1 Meter 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. (F)