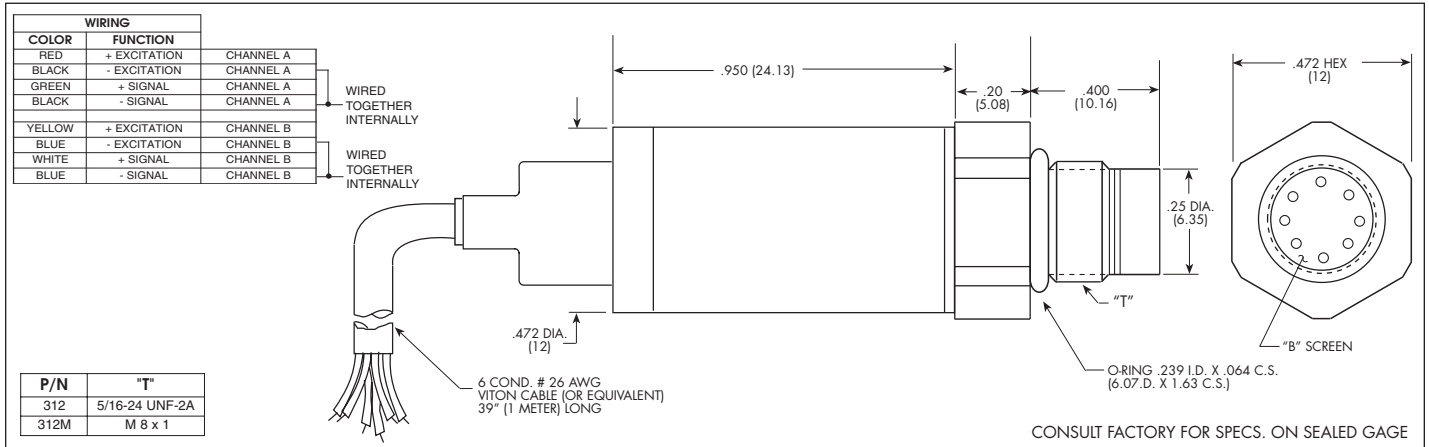




**ULTRAMINIATURE 5V DUAL OUTPUT IS®  
PRESSURE TRANSDUCER  
ETLR-634-312 (M) SERIES**

- Two Independent Sensing Elements In One Housing
- Dual Separate Output Signal
- Robust Construction
- Excellent Long Term Stability
- Patented Leadless Technology VIS®

The ETLR-634-312 (M) is an ultraminiature threaded redundant pressure transducer. The two sensing elements utilize a patented leadless technology, dual independent signal output combined in the same housing. The two sensing elements 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 Dual Output)  |                      |                      |                      | 5 VDC ± 75mV or 10 VDC ± 150mV (3 Wire System, Single Ended Dual Output) |                      |                      |                      |
| Full Scale Reading                                   |  |   |                      |                      |                      |  |                      |                      |                      |
| Output Impedance                                     |  | 200 Ohms (Nom.)   |                      |                      |                      |  |                      |                      |                      |
| 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)   |                      |                      |                      |  |                      |                      |                      |
| Total Error Band (Excluding End Point)               |  | ± 2% FS/180°F (100°C) ≤ 217.5 PSI (15 BAR), ± 1% FS/180°F (100°C) ≥ 217.5 PSI (15 BAR)                              |                      |                      |                      |  |                      |                      |                      |
| 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                                |  | 6 Conductor 26 AWG Viton Cable (or Equivalent) 1 Meter Long   |                      |                      |                      |  |                      |                      |                      |
| Weight   |  | 12 Grams Excluding Cable  |                      |                      |                      |  |                      |                      |                      |
| Pressure Sensing Principle                           |  | Two 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 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. (E)