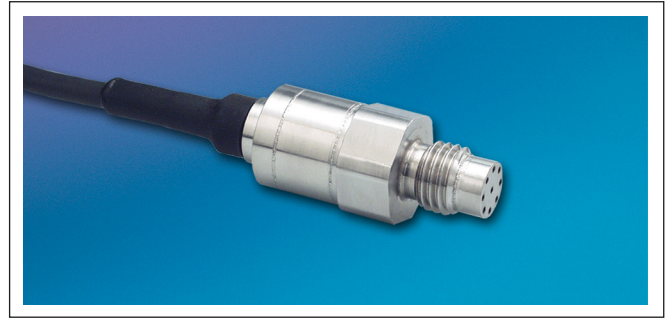




## MINIATURE 5VDC OUTPUT PRESSURE TRANSDUCER

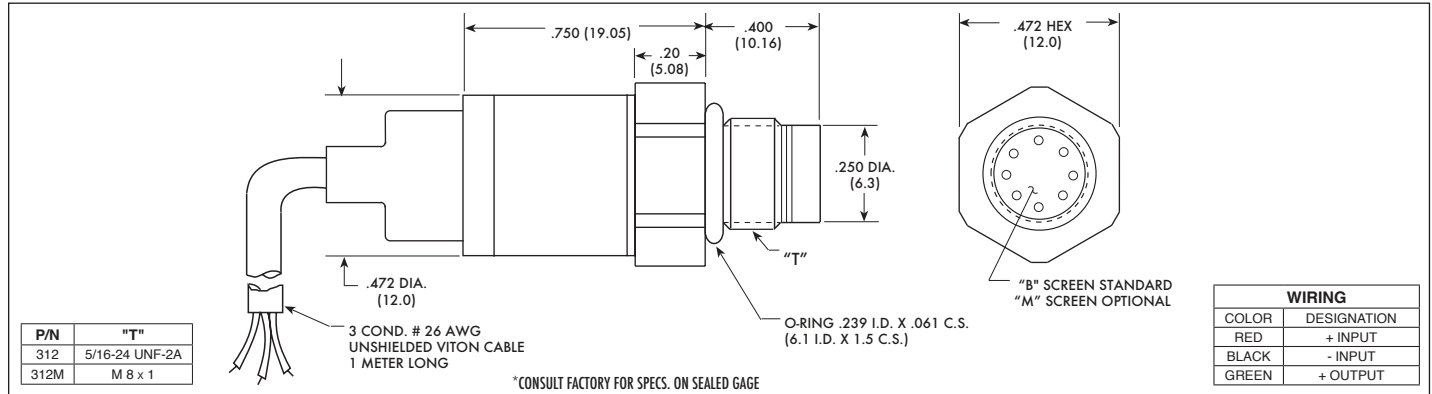
### ETL-634(X)-312(M)

- Smallest High Performance Amplified Transducer Worldwide
- High Temperature Electronics 365°F (185°C)
- Rugged Design Provides Compatibility With Most Corrosive and Conductive Media
- Patented Leadless Technology **VIS**<sup>®</sup>
- High Over Pressure Capability
- Designed and Engineered For Severe Environmental Conditions



The ETL-634(X)-312(M) Series transducers are miniature, threaded instruments. The sensing subassembly is protected from mechanical damage by a solid screen which has been shown to have minimal influence on the frequency response of the sensor. The ETL Series uses Kulite's Patented Leadless

Technology. Incorporation of a Kulite proprietary electronics module within the main body of this product allows for operation from an unregulated power supply ranging from 12 ± 4VDC or 28 ± VDC. Part performance not guaranteed if used in water.



|                 |  |   |                      |                      |                      |                      |                 |
|-----------------|--|---|----------------------|----------------------|----------------------|----------------------|-----------------|
| INPUT           | Pressure Range                                       | 1<br>15*  | 2<br>29              | 5<br>73              | 10<br>145            | 15 BAR<br>218 PSI    |                 |
|                 | Operational Mode                                     | Absolute, Sealed Gage   |                      |                      |                      |                      |                 |
|                 | Over Pressure  | 2 Times Rated Pressure  |                      |                      |                      |                      |                 |
|                 | Burst Pressure                                       | 3 Times Rated Pressure  |                      |                      |                      |                      |                 |
|                 | Pressure Media                                       | Most Conductive Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Supplied) |                      |                      |                      |                      |                 |
|                 | Rated Electrical Excitation                          | 12 ± 4 VDC  |                      |                      |                      |                      |                 |
|                 | Maximum Electrical Current                           | 25 mA (Max.)  |                      |                      |                      |                      |                 |
| OUTPUT          | Output Impedance                                     | 200 Ohms (Typ.)   |                      |                      |                      |                      |                 |
|                 | Full Scale Reading (X)                               | 4.9V ± 2% (A)   | 4.5V ± 1.5% (B)      | 4.5V ± 1% (C)        | 4.9V ± 1.5% (D)      | 4.75V ± 1% (E)       | 4.7V ± 1% (F)   |
|                 | Bandwidth (-3dB)                                     | DC to 5 KHz   |                      |                      |                      |                      |                 |
|                 | Residual Unbalance (X)                               | 350 ± 50 mV (A)   | 500 ± 75 mV (B)      | 300 ± 45 mV (C)      | 300 ± 75 mV (D)      | 300 ± 50 mV (E)      | 300 ± 50 mV (F) |
|                 | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% FSO BFSL (Typ.), ± 0.25% FSO (Max.)  |                      |                      |                      |                      |                 |
|                 | Resolution   | Infinitesimal   |                      |                      |                      |                      |                 |
|                 | Acceleration Sensitivity % FS/g Perpendicular        | 6.5x10 <sup>-4</sup>  | 4.2x10 <sup>-4</sup> | 2.3x10 <sup>-4</sup> | 1.4x10 <sup>-4</sup> | 1.1x10 <sup>-4</sup> |                 |
| ENVIRONMENTAL   | Insulation Resistance                                | > 100 Megohm Min. @ 50 VDC  |                      |                      |                      |                      |                 |
|                 | Operating Temperature Range                          | -65°F to +365°F (-55°C to +185°C)   |                      |                      |                      |                      |                 |
|                 | Compensated Temperature Range                        | +68°F to +350°F (+20°C to +175°C) Other Ranges Quoted on Request  |                      |                      |                      |                      |                 |
|                 | 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                                     | 100g Peak, Sine up to 5000 Hz   |                      |                      |                      |                      |                 |
| PHYSICAL        | Mechanical Shock                                     | 100g half Sine Wave 11 msec. Duration   |                      |                      |                      |                      |                 |
|                 | Electrical Connection                                | 3 Conductor 26 AWG Unshielded Cable 1 Meter Long  |                      |                      |                      |                      |                 |
|                 | Weight   | 15 Grams (Max.) 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                            |   |                      |                      |                      |                      |                 |

(X) Denotes FSR and Residual Unbalance Options (A), (B), (C), (D), (E) or (F).

Note: Custom pressure ranges, accuracies and mechanical configurations 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.