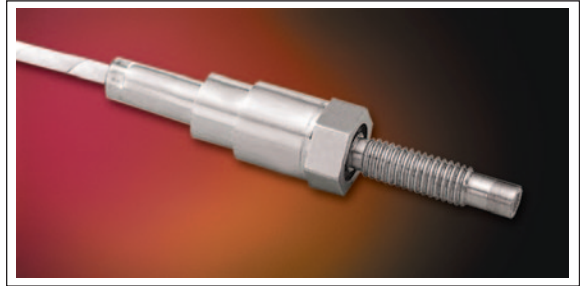




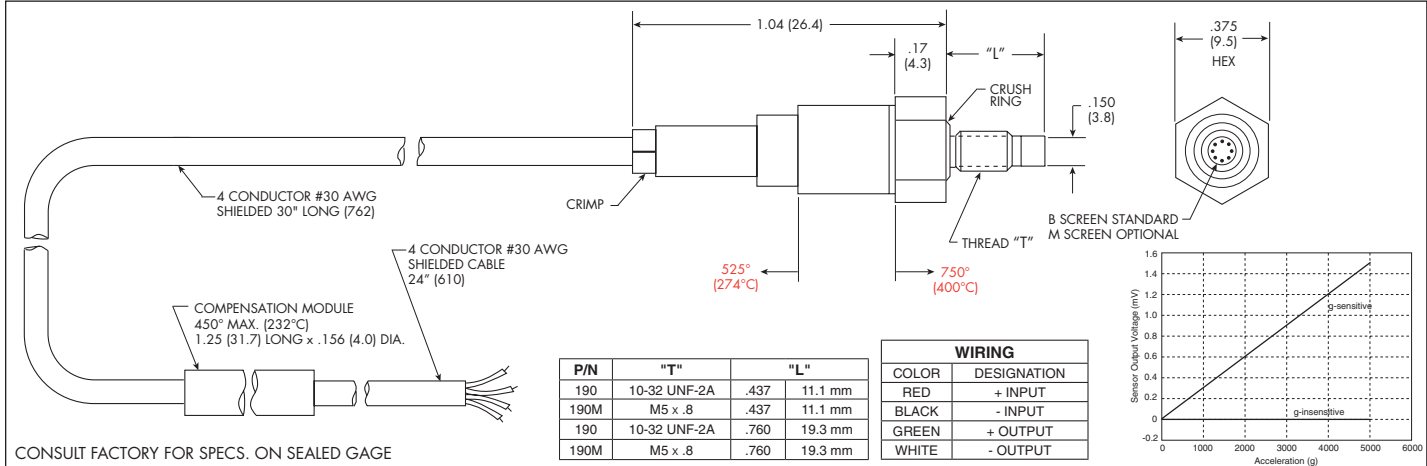
**HIGH TEMPERATURE LOW G SENSITIVITY IS® PRESSURE TRANSDUCER**

**XTEH-7LAC-190 (M) SERIES**

- Acceleration/Vibration Insensitive Design **VIS<sup>2</sup>**
- Patented Leadless Technology
- High Natural Frequency
- -65°F To 750°F Temperature Capability
- Suitable For Stall Avoidance Application



The XTEH Series pressure transducers feature a very wide operating temperature range and an extremely low G sensitivity. These characteristics make these devices ideal for Turbine engine testing especially in the areas of stall avoidance and active stability control. Other equally demanding applications in the industry may also benefit from the ruggedness of these devices.



CONSULT FACTORY FOR SPECS. ON SEALED GAGE

|  |   |           |          |           |           |           |            |             |                     |
|--|---|-----------|----------|-----------|-----------|-----------|------------|-------------|---------------------|
| <b>INPUT</b><br>Pressure Range                           | 1.7<br>25   | 3.5<br>50 | 7<br>100 | 14<br>200 | 21<br>300 | 35<br>500 | 70<br>1000 | 140<br>2000 | 210 BAR<br>3000 PSI |
| Operational Mode   | Absolute, Sealed Gage   |           |          |           |           |           |            |             |                     |
| Over Pressure  | 2 Times Rated Pressure  |           |          |           |           |           |            |             |                     |
| Burst Pressure   | 3 Times Rated Pressure  |           |          |           |           |           |            |             |                     |
| Pressure Media   | All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)   |           |          |           |           |           |            |             |                     |
| Rated Electrical Excitation                              | 10 VDC/AC   |           |          |           |           |           |            |             |                     |
| Maximum Electrical Excitation                            | 15 VDC/AC   |           |          |           |           |           |            |             |                     |
| Input Impedance  | 1000 Ohms (Min.)  |           |          |           |           |           |            |             |                     |
| <b>OUTPUT</b><br>Output Impedance                        | 1000 Ohms (Nom.)  |           |          |           |           |           |            |             |                     |
| Full Scale Output (FSO)                                  | 100 mV (Nom.)   |           |          |           |           |           |            |             |                     |
| Residual Unbalance                                       | ± 5 mV (Typ.)   |           |          |           |           |           |            |             |                     |
| Combined Non-Linearity, Hysteresis and Repeatability     | ± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.)  |           |          |           |           |           |            |             |                     |
| Resolution   | Infinitesimal   |           |          |           |           |           |            |             |                     |
| Natural Frequency (KHz) (Typ.)                           | 240   | 300       | 380      | 500       | 575       | 700       | 1000       | 1400        | 1650                |
| Acceleration Sensitivity % FS/g Perpendicular Transverse | N/A <<1x10 <sup>-6</sup>  |           |          |           |           |           |            |             |                     |
| Insulation Resistance                                    | 100 Megohm Min. @ 50 VDC  |           |          |           |           |           |            |             |                     |
| <b>ENVIRONMENTAL</b><br>Operating Temperature Range      | -65°F to +750°F (-55°C to +400°C) - Pressure Sensing Area<br>-65°F to +525°F (-55°C to +274°C) - Cable Area     |           |          |           |           |           |            |             |                     |
| Compensated Temperature Range                            | +80°F to +650°F (+25°C to +343°C)   |           |          |           |           |           |            |             |                     |
| Thermal Zero Shift                                       | ± 1.5% FS/100°F (Typ.)  |           |          |           |           |           |            |             |                     |
| Thermal Sensitivity Shift                                | ± 1.5% /100°F (Typ.)  |           |          |           |           |           |            |             |                     |
| Steady Acceleration and Linear Vibration                 | 1,000g. Sine  |           |          |           |           |           |            |             |                     |
| <b>PHYSICAL</b><br>Electrical Connection                 | 4 Conductor 30 AWG Shielded Cable (30" Before Module, 24" After Module)   |           |          |           |           |           |            |             |                     |
| Weight   | 8 Grams (Nom.) Excluding Cable  |           |          |           |           |           |            |             |                     |
| Pressure Sensing Principle                               | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology |           |          |           |           |           |            |             |                     |
| Mounting Torque  | 15 Inch-Pounds (Max.) 1.7 N-m   |           |          |           |           |           |            |             |                     |

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. Note: Requires external compensation module (Max. temp. 450°F) Please refer to outline drawing.