

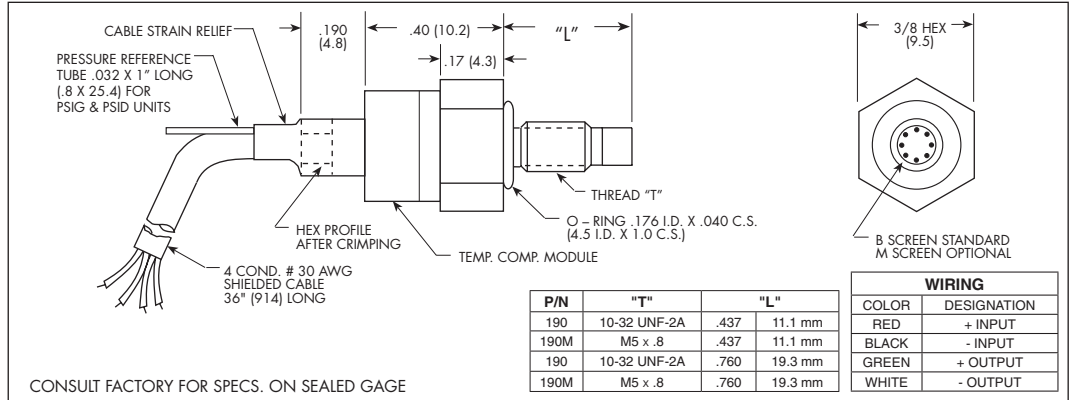
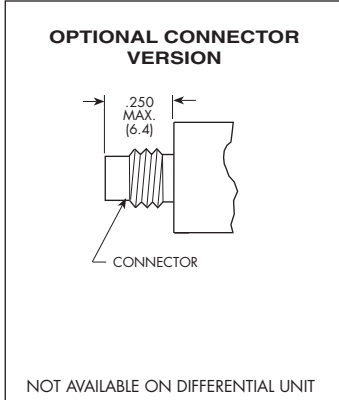
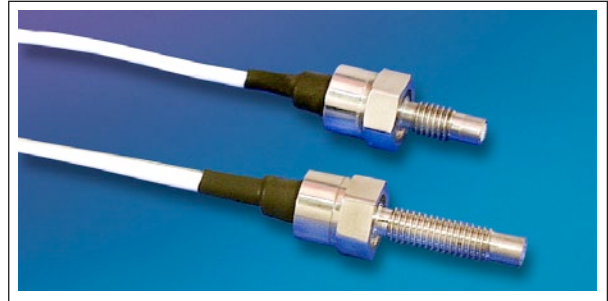


**MINIATURE RUGGEDIZED  
IS® PRESSURE TRANSDUCER  
XTL-190 (M) SERIES**

- Easy Installation
- Patented Leadless Technology VIS®
- High Natural Frequency
- Intrinsically Safe Applications Available (i.e. IS-XTL-190)



The ruggedness of this sensor has not compromised its performance. It was designed for ease of installation and will operate properly in any medium compatible with 15-5 SS or SiO<sub>2</sub>. Its Patented Leadless construction makes it possible for the sensing unit to be installed in such a way that will not compromise its high natural frequency.



|  |   |                      |                      |                      |                      |                       |                      |                      |                      |
|--|---|----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|
| <b>INPUT</b><br>Pressure Range                       | 0.35<br>5   | 0.7<br>10            | 1.7<br>25            | 3.5<br>50            | 7<br>100             | 17<br>250             | 35<br>500            | 70<br>1000           | 140 BAR<br>2000 PSI  |
| Operational Mode                                     | Absolute, Gage, Sealed Gage, Differential   |                      |                      |                      |                      | Absolute, Sealed Gage |                      |                      |                      |
| Over Pressure  | 2 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)   |                      |                      |                      |                      |                       |                      |                      |                      |
| Burst Pressure                                       | 3 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)   |                      |                      |                      |                      |                       |                      |                      |                      |
| 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.)                       | 150   | 175                  | 240                  | 300                  | 380                  | 550                   | 700                  | 1000                 | 1400                 |
| Acceleration Sensitivity % FS/g Perpendicular        | 1.5x10 <sup>-3</sup>  | 1.0x10 <sup>-3</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> | 4.5x10 <sup>-5</sup> | 2.0x10 <sup>-5</sup> |
| Transverse   | 2.2x10 <sup>-4</sup>  | 1.4x10 <sup>-4</sup> | 6.0x10 <sup>-5</sup> | 4.0x10 <sup>-5</sup> | 2.0x10 <sup>-5</sup> | 9.0x10 <sup>-6</sup>  | 6.0x10 <sup>-6</sup> | 3.0x10 <sup>-6</sup> | 2.0x10 <sup>-6</sup> |
| Insulation Resistance                                | 100 Megohm Min. @ 50 VDC  |                      |                      |                      |                      |                       |                      |                      |                      |
| <b>ENVIRONMENTAL</b><br>Operating Temperature Range  | -65°F to +350°F (-55°C to +175°C)   |                      |                      |                      |                      |                       |                      |                      |                      |
| Compensated Temperature Range                        | +80°F to +180°F (+25°C to +80°C) Any 100°F Range Within The Operating Range on Request                          |                      |                      |                      |                      |                       |                      |                      |                      |
| Thermal Zero Shift                                   | ± 1% FS/100°F (Typ.)  |                      |                      |                      |                      |                       |                      |                      |                      |
| Thermal Sensitivity Shift                            | ± 1% /100°F (Typ.)  |                      |                      |                      |                      |                       |                      |                      |                      |
| Steady Acceleration                                  | 10,000g. (Max.)   |                      |                      |                      |                      |                       |                      |                      |                      |
| Linear Vibration                                     | 10-2,000 Hz Sine, 100g. (Max.)  |                      |                      |                      |                      |                       |                      |                      |                      |
| <b>PHYSICAL</b><br>Electrical Connection             | 4 Conductor 30 AWG Shielded Cable 36" Long  |                      |                      |                      |                      |                       |                      |                      |                      |
| Weight   | 4 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.

Continuous development of our products can result in specific performance improvements on request. SUNSTAR 自动化 <http://www.sensor-ic.com/> TEL: 0755-83376489 FAX: 0755-83376182 E-MAIL: szss20@163.com