



## HIGH TEMPERATURE PRESSURE TRANSDUCER

### XTEH-7L-190(S/L)(M) SERIES

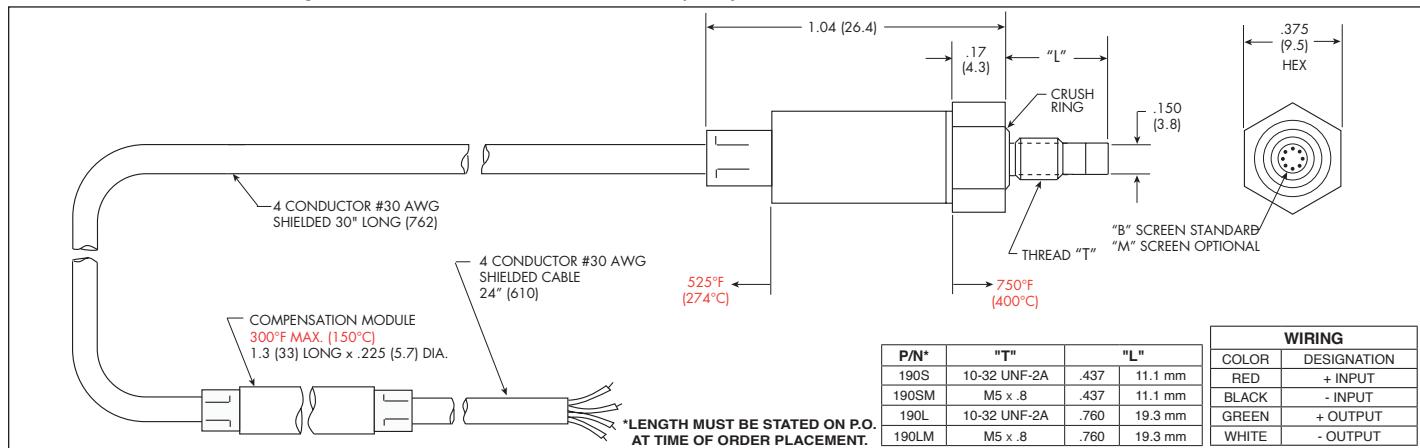
- -65°F To 750°F Temperature Capability
- Patented Leadless Technology **VIS®**
- High Natural Frequency
- Suitable For Turbine Engine Testing

The XTEH Series pressure transducers feature a very wide operating temperature range. These characteristics make these devices ideal for Turbine engine testing. Other equally demanding applications in the industry may also benefit from the ruggedness of these devices.

Part performance not guaranteed if used in water.



Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the XTEH-7L-190 transducer.



INPUT	Pressure Range	1.7 25	3.5 50	7 100	14 200	21 300	35 500	70 1000	140 2000	210 BAR 3000 PSI
Absolute, Sealed Gage										
Over Pressure										
2 Times Rated Pressure to 500 PSI (35 BAR), 1.5 Times Rated Pressure Above 500 PSI (35 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										
Maximum Electrical Excitation										
12 VDC										
Input Impedance										
1000 Ohms (Min.)										
OUTPUT										
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 of Sensor Without Screen (KHz) (Typ.)										
240 300 380 500 575 700 1000 1400 1650										
Acceleration Sensitivity % FS/g Perpendicular										
5.0x10 <sup>-4</sup> 3.0x10 <sup>-4</sup> 1.5x10 <sup>-4</sup> 1.1x10 <sup>-4</sup> 9.0x10 <sup>-5</sup> 6.5x10 <sup>-5</sup> 4.0x10 <sup>-5</sup> 2.5x10 <sup>-5</sup> 1.9x10 <sup>-5</sup>										
Insulation Resistance										
100 Megohm Min. @ 50 VDC										
ENVIRONMENTAL										
Operating Temperature Range										
-65°F to +750°F (-55°C to +400°C) - Pressure Sensing Area										
-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.)										
Linear Vibration										
20g Peak, Sine 10 to 2000 Hz										
Mechanical Shock										
20g Half Sine Wave 11 msec. Duration										
PHYSICAL										
Electrical Connection										
4 Conductor 30 AWG Shielded Cable (30" Before Module, 24" (610) 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										
70 Inch-Pounds (Max.) 8 N-m										

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (W)

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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.