

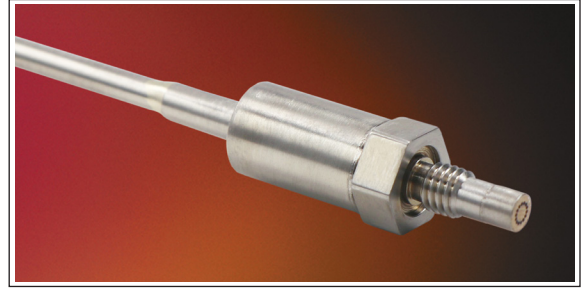


SUPER HIGH TEMPERATURE PRESSURE TRANSDUCER

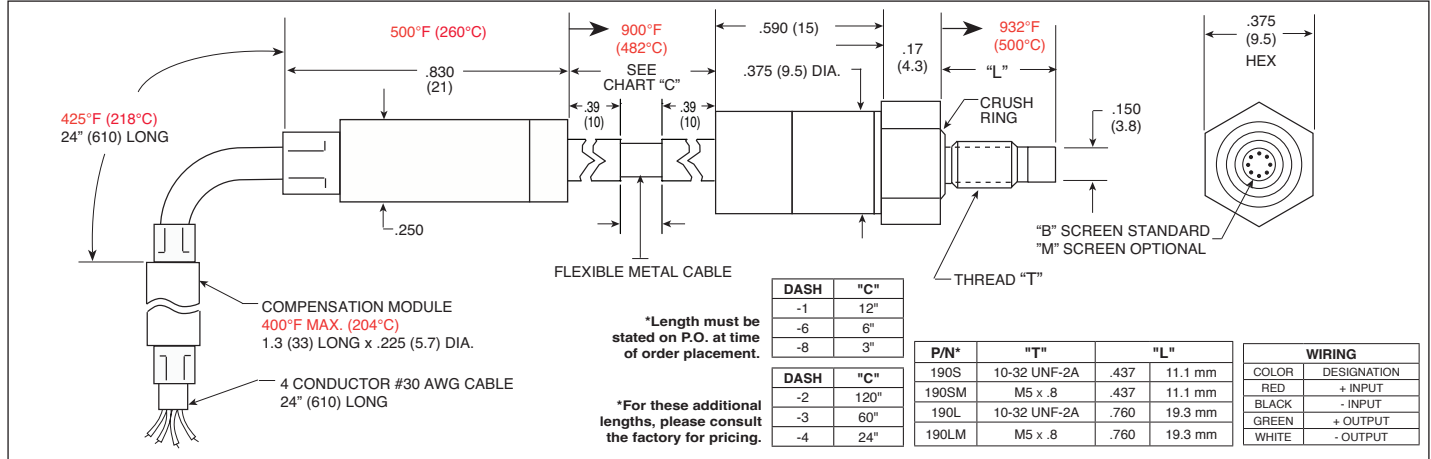
XTEH-10L-190 (M) SERIES

- -65°F To 932°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-10L-190 transducer.



	1.7	3.5	7	14	21	35	70	140	210 BAR
INPUT	25	50	100	200	300	500	1000	2000	3000 PSI
Pressure Range									
Operational Mode	Absolute, Sealed Gage								
Over Pressure	2 Times Rated Pressure to a Maximum of 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	Most 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 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.1x10 ⁻⁴	9.0x10 ⁻⁵	6.5x10 ⁻⁵	4.0x10 ⁻⁵	2.5x10 ⁻⁵	1.9x10 ⁻⁵
Insulation Resistance	100 Megohm Min. @ 50 VDC								
ENVIRONMENTAL									
Operating Temperature Range	-65°F to +932°F* (-55°C to +500°C) - (See limits above)								
Compensated Temperature Range	+80°F to +850°F (+25°C to +454°C)								
Thermal Zero Shift	± 1.5% FS/100°F (Typ.)								
Thermal Sensitivity Shift	± 1.5% /100°F (Typ.)								
Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)								
Mechanical Shock	20g half Sine Wave 11 msec. Duration								
PHYSICAL									
Electrical Connection	4 Conductor 30 AWG Shielded Cable (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								

* Limited life above 850°F (454°C), dependent on operating conditions.

Note: Requires external compensation module (Max. temp. 400°F) Please refer to outline drawing.

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