

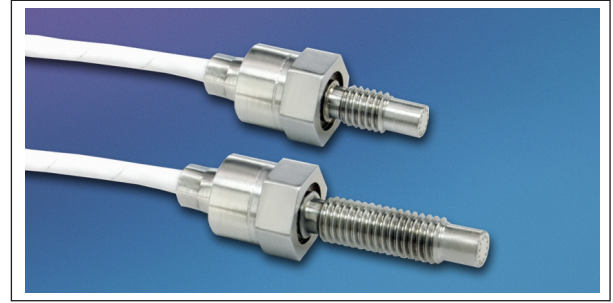


# MINIATURE LOW PRESSURE HIGH OVERLOAD PRESSURE TRANSDUCER

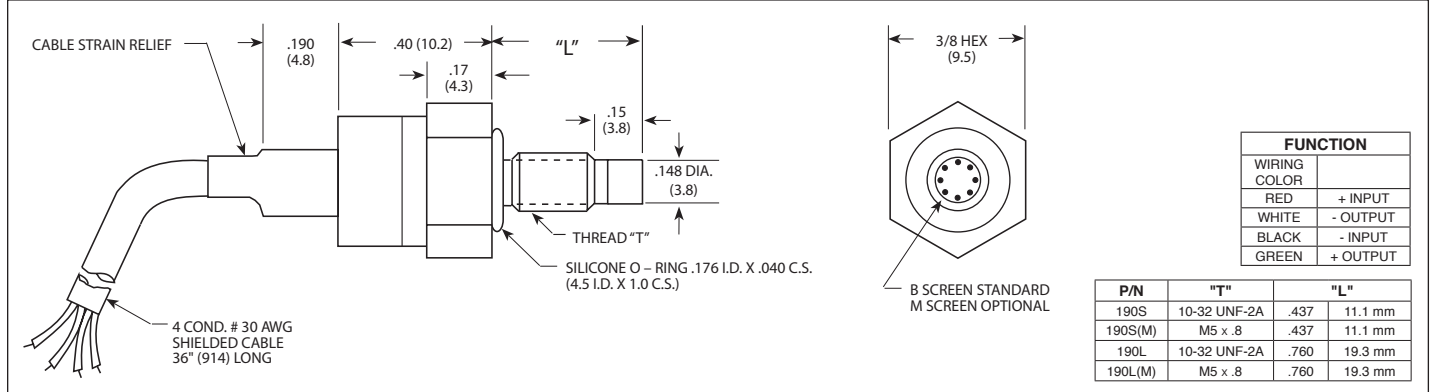
## XST-190 (M) SERIES

- High Overpressure Capability Without Damage
- Easy Installation
- High Natural Frequency
- Silicon on Silicon Integrated Sensor **VIS®**

The ruggedness of this sensor has not compromised its performance. It was designed for ease of installation.



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



INPUT	Pressure Range	0.35 5	1.7 25	3.5 50	7 100	17 BAR 250 PSI
	Operational Mode	Absolute				
	Over Pressure	14 200	35 500	70 1000	70 1000	140 BAR 2000 PSI
	Burst Pressure	3000 PSI (210 BAR)				
	Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (All Media May Not Be Suitable With O-Ring Supplied)				
	Rated Electrical Excitation	10 VDC/AC				
	Maximum Electrical Excitation	12 VDC/AC				
	Input Impedance	1000 Ohms (Min.)				
OUTPUT	Output Impedance	1000 Ohms (Nom.)				
	Full Scale Output (FSO)	75 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.)	150	240	300	380	550
	Acceleration Sensitivity % FS/g Perpendicular	1.5x10 <sup>-3</sup>	5.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>
	Insulation Resistance	100 Megohm Min. @ 50 VDC				
ENVIRONMENTAL	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.)				
PHYSICAL	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)				
	Electrical Connection	4 Conductor 30 AWG Shielded Cable 36" Long				
	Weight	4 Grams (Nom.) Excluding Cable				
	Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon				
Mounting Torque	15 Inch-Pounds (Max.) 1.7 Nm					

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