



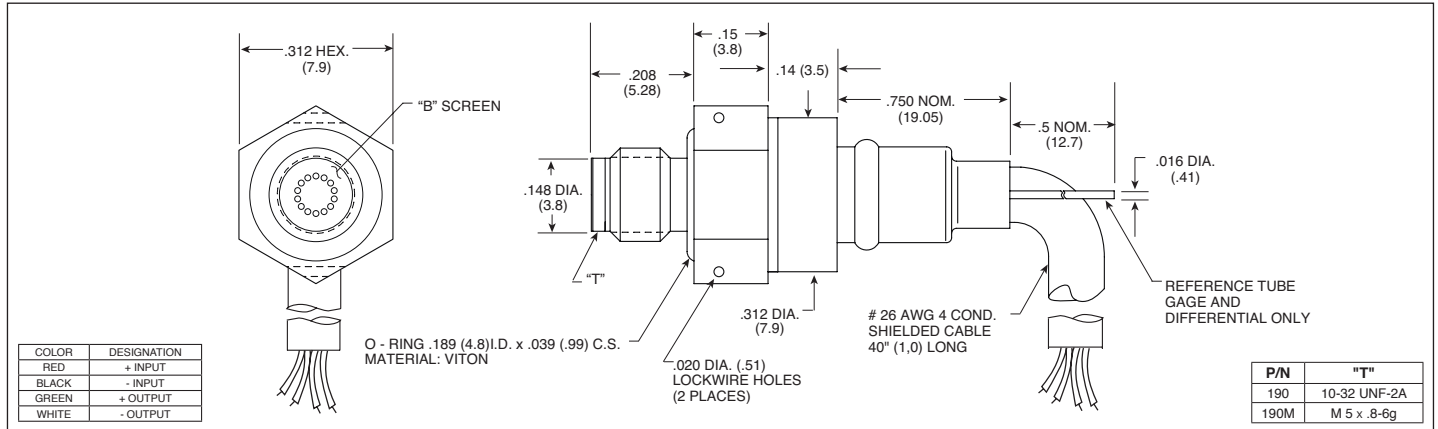
# RUGGEDIZED AUTOMOTIVE PRESSURE TRANSDUCERS

## XTL-123G-190 (M) SERIES

- Easy Installation
- High Natural Frequency
- 10-32 UNF or M 5 x .8-6g Thread
- Wide Temperature Range
- Compatible With Most Automotive Fluids
- Patented Leadless Technology **VIS**<sup>®</sup>



Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the XTL-123G-190 transducer.



INPUT	Pressure Range	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	100 1500	210 BAR 3000 PSI	
	Operational Mode	Absolute, Gage, Differential	Absolute, Sealed Gage, Gage, Differential				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 4500 PSI (315 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									
OUTPUT	Input Impedance	1000 Ohms (Min.), 5000 Ohms (Max.)									
	Output Impedance	2000 Ohms (Max.)									
	Full Scale Output (FSO)	100 mV ± 10 mV									
	Residual Unbalance	± 5mV (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.)	Greater Than 175 KHz									
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	6.5x10 <sup>-4</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>	3.5x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	
	Insulation Resistance	100 Megohm Min. @ 50 VDC									
	Operating Temperature Range	-40°F to +400°F (-40°C to +204°C)									
	Compensated Temperature Range	-40°F to +350°F (-40°C to +176°C)									
	Thermal Zero Shift	± 1% FS/100°F (Typ.)									
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)									
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)									
PHYSICAL	Mechanical Shock	20g half Sine Wave 11 msec. Duration									
	Electrical Connection	4 Conductor 26 AWG Shielded Viton Cable 40" (1,0) Long									
	Weight	5 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										

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (G) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2016 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.