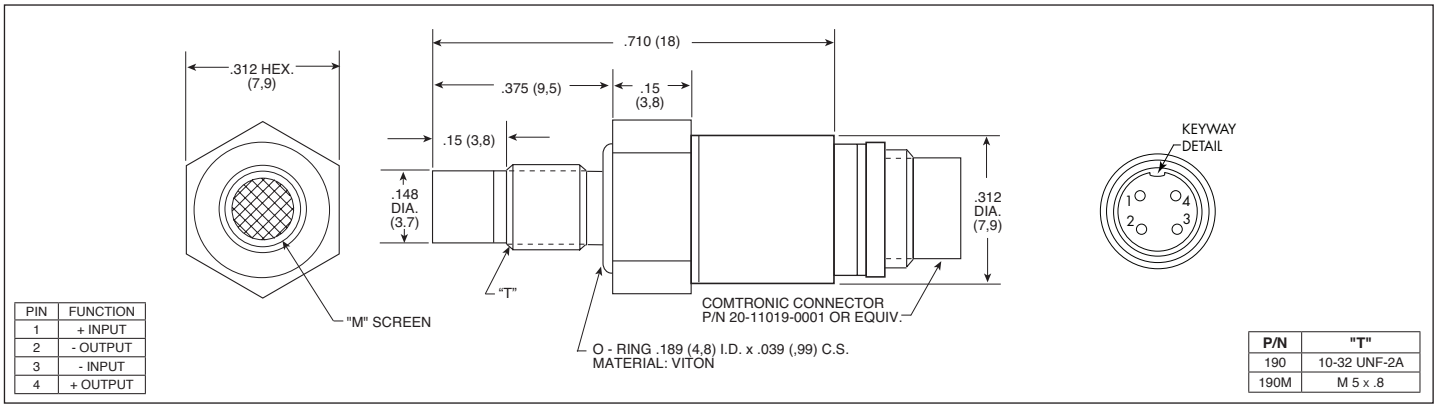
RUGGEDIZED AUTOMOTIVE PRESSURE TRANSDUCERS

XTL-142B-190 (M) SERIES

- Easy Installation With Integral Connector
- High Natural Frequency
- 10-32 UNF or M 5 x .8 Thread
- Wide Temperature Range
- Compatible With Most Automotive Fluids
- Patented Leadless Technology **VIS**®

Part performance not guaranteed if used in water.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the XTL-142B-190 transducer.



PIN	FUNCTION
1	+ INPUT
2	- OUTPUT
3	- INPUT
4	+ OUTPUT

P/N	"T"
190	10-32 UNF-2A
190M	M 5 x .8

INPUT	Pressure Range	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	210 BAR 3000 PSI
	Operational Mode	Absolute	Absolute, Sealed Gage						
	Over Pressure	2 Times Rated Pressure to a Maximum of 4500 PSI (315 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							
	Input Impedance	1000 Ohms (Min.), 5000 Ohms (Max.)							
OUTPUT	Output Impedance	2000 Ohms (Max.)							
	Full Scale Output (FSO)	100 mV ± 10 mV							
	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.)	Greater Than 175 KHz							
	Acceleration Sensitivity % FS/g Perpendicular	$6.5x10^{-4}$	$5.0x10^{-4}$	$3.0x10^{-4}$	$1.5x10^{-4}$	$1.0x10^{-4}$	$6.0x10^{-5}$	$4.5x10^{-5}$	$2.0x10^{-5}$
	Insulation Resistance	100 Megohm Min. @ 50 VDC							
ENVIRONMENTAL	Operating Temperature Range	-65°F to +390°F (-55°C to +200°C)							
	Compensated Temperature Range	-40°F to +350°F (-40°C to +175°C)							
	Thermal Zero Shift	± 1% FS/100°F (Typ.)							
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)							
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz							
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration							
PHYSICAL	Electrical Connection	Comtronic Connnector P/N 20-11019-0001 or Equivalent (Mating Connector Available Upon Request)							
	Weight	5 Grams (Nom.)							
	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. (Y) 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.

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