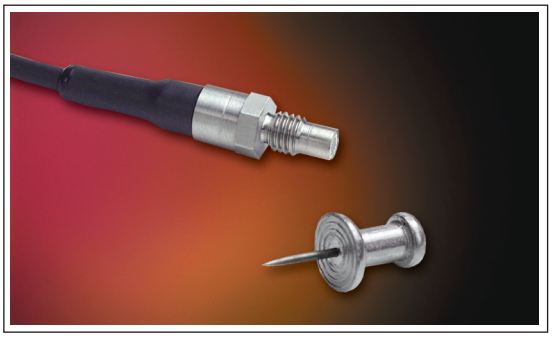
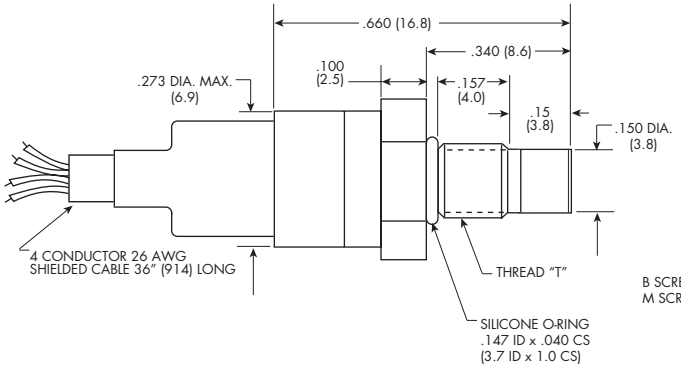
MINIATURE PRESSURE TRANSDUCER
XTL-193-190 (M) SERIES

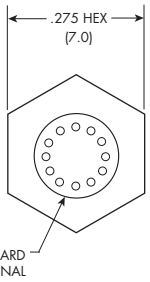


- Robust Construction
- Ultra Miniature Construction
- Patented Leadless Technology **VIS**®
- Compatible With Most Automotive Fluids

The XTL-193-190 pressure transducer series incorporates the latest pressure sensing technology – Kulite's dielectrically isolated, silicon on silicon, patented leadless sensing element, which enables this device to be used in harsh environments. This device delivers a FSO of 100mV when excited with a 10VDC supply. The ultra miniature construction, provides a compact, robust package. This combined with the high temperature capability of +400°F, makes the XTL-193-190 ideally suitable for applications where space is limited. Part performance not guaranteed if used in water.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the XTL-193-190 transducer.





WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	– INPUT
GREEN	+ OUTPUT
WHITE	– OUTPUT

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

INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	140 2000	150 2175	210 BAR 3045 PSI
	Operational Mode	Absolute		Absolute, Sealed Gage								
	Over Pressure	2 Times Rated Pressure										
	Burst Pressure	3 Times Rated Pressure										
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Supplied)										
	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.)	175	200	240	300	380	550	700	1000	1400	1500	1750
	Acceleration Sensitivity % FS/g Perpendicular	$1.0x10^{-3}$	$6.5x10^{-4}$	$5.0x10^{-4}$	$5.0x10^{-4}$	$1.5x10^{-4}$	$1.0x10^{-4}$	$6.0x10^{-5}$	$4.5x10^{-5}$	$2.0x10^{-5}$	$1.9x10^{-5}$	$1.7x10^{-5}$
	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	4 Conductor 26 AWG Shielded Cable 36" Long										
	Weight	4 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 Nm										

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