



MINIATURE RUGGEDIZED

PRESSURE TRANSDUCER

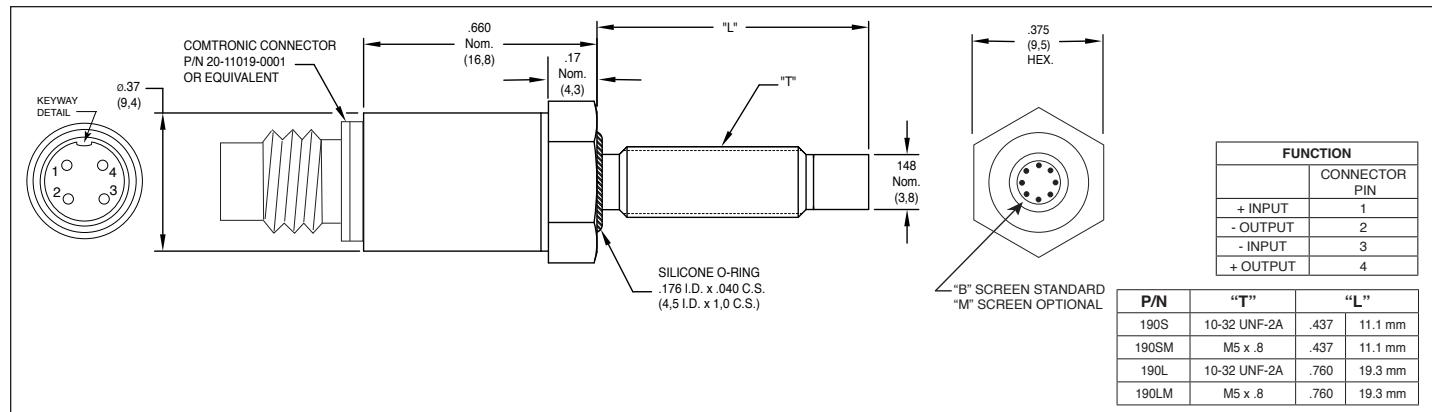
XT-100-190(S/L)(M) SERIES

- Easy Installation
- Silicon on Silicon Integrated Sensor VIS®
- High Natural Frequency

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 XT-100-190 transducer.



INPUT	Pressure Range	0.35 5	0.7 10	1 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	140 BAR 2000 PSI
	Operational Mode	Absolute									
	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 5000 PSI (350 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									
OUTPUT	Input Impedance	1000 Ohms (Min.)									
	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.)	150	175	200	240	300	380	550	700	1000	
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	1.5x10 ⁻³	1.0x10 ⁻³	6.5x10 ⁻⁴	5.0x10 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.0x10 ⁻⁴	6.0x10 ⁻⁵	4.5x10 ⁻⁵	
	Insulation Resistance	100 Megohm Min. @ 50 VDC									
	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.)									
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration									
PHYSICAL	Linear Vibration	20g Peak, Sine 10 to 2000 Hz									
	Electrical Connection	Comtronic Connector P/N 20-11019-0001 or Equivalent (Mating Connector Available Upon Request)									
	Weight	6 Grams (Nom.)									
	Pressure 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. (C)

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