



MINIATURE RUGGEDIZED HIGH TEMPERATURE PRESSURE TRANSDUCER

XTME-190 (M) SERIES

- Wide Temperature Capability -20°F To 450°F
- Excellent Stability
- High Natural Frequency
- Inorganically Bonded Sensor
- Robust Construction

The XTME-190 Series transducers are physically identical to the XTM-190 Series. High temperature material and assembly processes allow continuous use at maximum operating temperatures of +450°F (+232°C).



Kulite recommends the [KSC Series](#) of signal conditioners to maximize the measurement capability of the XTME-190 transducer.

OPTIONAL CONNECTOR VERSION

ORDER AS: XTME-100-190(M)

NOT AVAILABLE ON GAGE OR DIFFERENTIAL UNIT

P/N*	"T"	"L"	
190S	10-32 UNF-2A	.437	11.1 mm
190S(M)	M5 x .8	.437	11.1 mm
190L	10-32 UNF-2A	.745	18.9 mm
190L(M)	M5 x .8	.745	18.9 mm

FUNCTION		
WIRING COLOR		CONNECTOR PIN
RED	+ INPUT	1
WHITE	- OUTPUT	2
BLACK	- INPUT	3
GREEN	+ OUTPUT	4

***LENGTH MUST BE STATED ON P.O. AT TIME OF ORDER PLACEMENT.**

INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI	
	Operational Mode	Absolute, Gage, Differential	Absolute, Gage, Sealed Gage, Differential			Absolute, Sealed Gage				
	Over Pressure	2 Times Rated Pressure				1.5 Times Rated Pressure				
	Burst Pressure	3 Times Rated Pressure to a Maximum of 6000 PSI (420 BAR)								
	Pressure Media	Any Liquid or Gas Compatible With 17-4 PH or 15-5 Stainless Steel (All Media May Not Be Suitable With O-Ring Supplied)								
	Rated Electrical Excitation	10 VDC								
	Maximum Electrical Excitation	12 VDC								
OUTPUT	Input Impedance	650 Ohms (Min.)								
	Output Impedance	1000 Ohms (Nom.)								
	Full Scale Output (FSO)	75 mV (Nom.)								
	Residual Unbalance	± 5 mV (Typ.)								
	Combined Non-Linearity, Hysteresis and Repeatability	±1% FSO BFSL (Typ.)								
	Resolution	Infinitesimal								
	Natural Frequency (KHz) (Typ.)	75	95	125	210	290	410	560	930	
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	2.3x10 ⁻³	1.4x10 ⁻³	9.6x10 ⁻⁴	6.2x10 ⁻⁴	4.3x10 ⁻⁴	3.0x10 ⁻⁴	2.1x10 ⁻⁴	1.3x10 ⁻⁴	
	Insulation Resistance	100 Megohm Min. @ 50 VDC								
	Operating Temperature Range	-20°F to +450°F (-29°C to +232°C)								
	Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)								
	Thermal Zero Shift	± 2% FS/100°F (Typ.)								
	Thermal Sensitivity Shift	± 2% /100°F (Typ.)								
	Linear Vibration	10-2,000 Hz Sine, 20g. (Max.)								
PHYSICAL	Electrical Connection	4 Conductor 30 AWG Shielded Cable 36" Long								
	Weight	8 Grams (Nom.) Excluding Cable								
	Pressure Sensing Principle	Inorganically Bonded Piezoresistive Sensor								
	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. (O) 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.