

## STANDARD VERSION MINIATURE PRESSURE TRANSDUCER

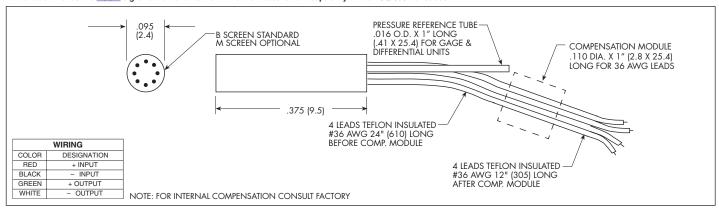
## XCQ-093 SERIES

- Ideal For Turbine Engine Probes and Wind Tunnel Applications
- 50 Year History Of Successful Applications In Wind Tunnel And Flight Test Programs
- Patented Silicon on Silicon Integrated Sensor VIS®
- Size And Shape Ideal For Incorporation In User Designed Probes
- Excellent Static And Dynamic Performance

The XCQ-093 Series allows for a very rugged package suited for probes, pressure rakes and other similar test set ups. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments.



Kulite recommends the KSC-2 signal conditioner to maximize the measurement capability of the XCQ-093 transducer.



	Pressure Range	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	70 BAR 1000 PSI
INPUT	Operational Mode	Absolute, Gage, Differential Absolute, Gage, Sealed Gage, Differential Absolute, Sealed Gage							
	Over Pressure	2 Times Rated Pressure							
	Burst Pressure	3 Times Rated Pressure							
	Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases							
	Rated Electrical Excitation	10 VDC/AC							
	Maximum Electrical Excitation	12 VDC/AC							
	Input Impedance	1000 Ohms (Min.)							
ENVIRONMENTAL 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.)	150	175	240	300	380	550	700	1000
	Acceleration Sensitivity % FS/g Perpendicular	1.5x10 <sup>-3</sup>	1.0x10 <sup>-3</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>
	Insulation Resistance	100 Megohm Min. @ 50 VDC							
	Operating Temperature Range	-65°F to +250°F (-55°C to +120°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.)							
	Steady Acceleration	10,000g. (Max.)							
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)							
AL	Electrical Connection	4 Leads 36 AWG 36" Long							
PHYSICAL	Weight	.4 Gram (Nom.) Excluding Module and Leads							
PH	Pressure Sensing Principle	nsing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							

Note: Custom pressure range Continuous development and refi Kulite miniature pressure transducers are intended for use in designed to be used in production programs, please consult the factory. All dimensions nominal. (N) All Rights Reserved.