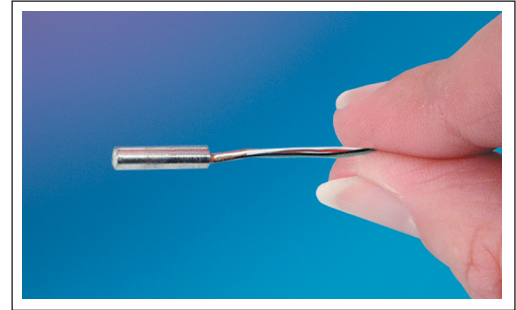




CRYOGENIC STANDARD VERSION MINIATURE PRESSURE TRANSDUCER

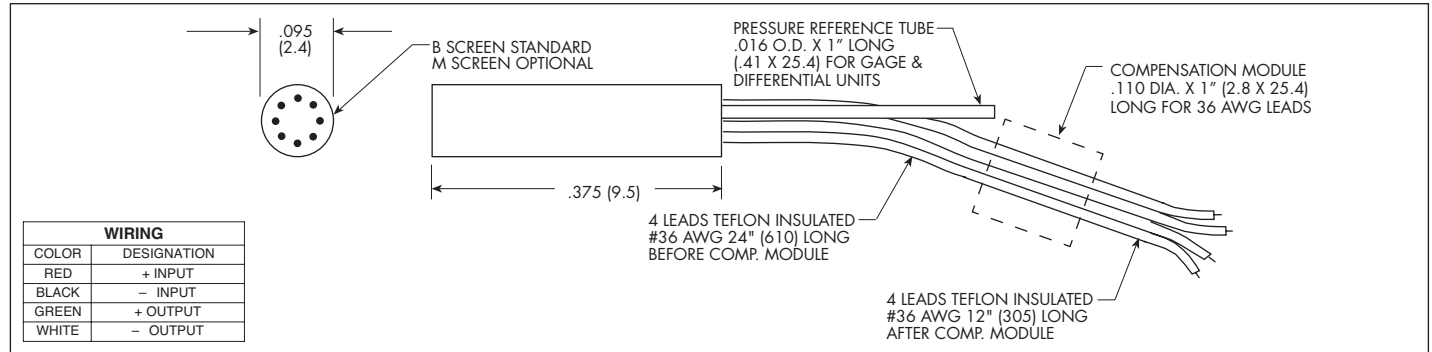
CCQ-093 SERIES

- Cryogenic Operation -320°F to +250°F (-195.5°C to +120°C)
- 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



Similar in design to the XCQ-093 Series, these sensors are specifically intended for use in cryogenic wind tunnels. The extremely good low temperature stability of Kulite Sensors make them ideally suited for this application.

Kulite recommends the [KSC Series](#) of signal conditioners to maximize the measurement capability of the CCQ-093 transducer.



	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	70 BAR 1000 PSI
INPUT								
Pressure Range	Absolute, Gage, Differential		Absolute, Gage, Sealed Gage, Differential			Absolute, Sealed Gage		
Operational Mode	2 Times Rated Pressure							
Over Pressure	3 Times Rated Pressure							
Burst Pressure	Most Nonconductive, Noncorrosive Liquids or Gases							
Pressure Media	10 VDC							
Rated Electrical Excitation	12 VDC							
Maximum Electrical Excitation	1000 Ohms (Min.)							
Input Impedance	1000 Ohms (Nom.)							
Output Impedance	100 mV (Nom.)							
Full Scale Output (FSO)	± 5 mV (Typ.)							
Residual Unbalance	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)							
Combined Non-Linearity, Hysteresis and Repeatability	Infinitesimal							
Resolution	150	175	240	300	380	550	700	1000
Natural Frequency of Sensor Without Screen (KHz) (Typ.)	1.5x10 ⁻³	1.0x10 ⁻³	5.0x10 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.0x10 ⁻⁴	6.0x10 ⁻⁵	4.5x10 ⁻⁵
Acceleration Sensitivity % FS/g Perpendicular	100 Megohm Min. @ 50 VDC							
Insulation Resistance	-320°F to +250°F (-195.5°C to +120°C)							
Operating Temperature Range	-300°F to +100°F (-184.4°C to +37.5°C)							
Compensated Temperature Range	± 1% FS/100°F (Typ.)							
Thermal Zero Shift	± 1% /100°F (Typ.)							
Thermal Sensitivity Shift	10-2,000 Hz Sine, 100g. (Max.)							
Linear Vibration	20g half Sine Wave 11 msec. Duration							
Mechanical Shock	4 Leads 36 AWG 36" Long							
Electrical Connection	.4 Gram (Nom.) Excluding Module and Leads							
Weight	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							
Pressure Sensing Principle								

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (H) 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.