

## **ULTRAMINIATURE THIN LINE IS® PRESSURE TRANSDUCERS**

## **LQ-062 SERIES**

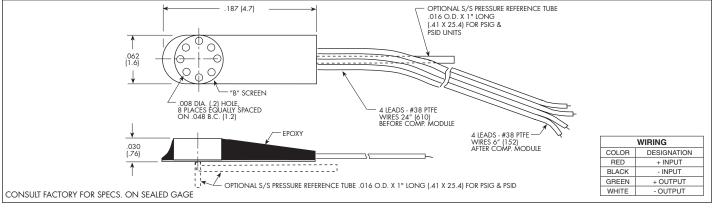
- Ideal For Wind Tunnel Applications
- Excellent Static And Dynamic Performance
- High Natural Frequency
- Silicon on Silicon Integrated Sensor VIS®

## **LE-062 SERIES**

- High Temperature Capabilities
   -65°F + 450°F
- Excellent Static And Dynamic Performance
- High Natural Frequency
- Silicon on Silicon Integrated Sensor VIS®

The LQ/LE Series demonstrates Kulite's ability to provide pressure transducers suited for adaptation into custom packages. These devices can be integrated into various test articles such as fan blades, engine nozzles of various types, etc. The features of these transducers include small foot print, high natural frequency, extreme resistance to vibration and shock, and wide temperature range.





INPUT Pressure Range	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	70 BAR 1000 PSI
Operational Mode	Absolute, Gage, Sealed Gage, Differential Absolute, Sealed Ga							age
Over Pressure	2 Times Rated Pressure With No Change In Calibration							
Burst Pressure	3 Times Rated Pressure							
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases							
Rated Electrical Excitation	10 VDC/AC							
Maximum Electrical Excitation	15 VDC/AC							
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 (KHz) (Typ.)	150	175	240	300	380	550	700	1000
Acceleration Sensitivity % FS/g Perpendicular Transverse	1.5x10 <sup>-3</sup> 2.2x10 <sup>-4</sup>	1.0x10 <sup>-3</sup> 1.4x10 <sup>-4</sup>	5.0x10 <sup>-4</sup> 6.0x10 <sup>-5</sup>	3.0x10 <sup>-4</sup> 4.0x10 <sup>-5</sup>	1.5x10 <sup>-4</sup> 2.0x10 <sup>-5</sup>	1.0x10 <sup>-4</sup> 9.0x10 <sup>-6</sup>	6.0x10 <sup>-5</sup> 6.0x10 <sup>-6</sup>	4.5x10 <sup>-5</sup> 3.0x10 <sup>-6</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC							
ENVIRONMENTAL Operating Temperature Range	LQ SERIES -65°F to +250°F (-55°C to +120°C) LE SERIES -65°F to +450°F (-55°C to +235°C)							
Compensated Temperature Range	LQ SERIES +80°F to +180°F (+25°C to +80°C) Any 100°F Range Within The Operating Range on Request LE SERIES 80°F to +450°F (25°C to +235°C)							
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.)							
PHYSICAL Electrical Connection	4 Leads 38 AWG 30" Long							
Weight	.2 Gram (Nom.) Excluding Module and Leads							
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							

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