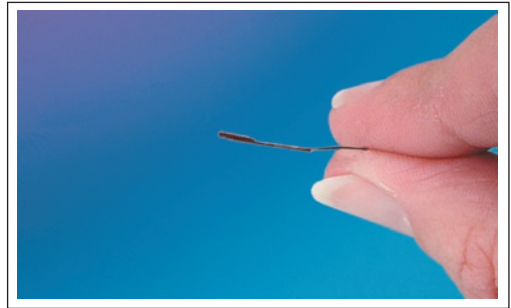


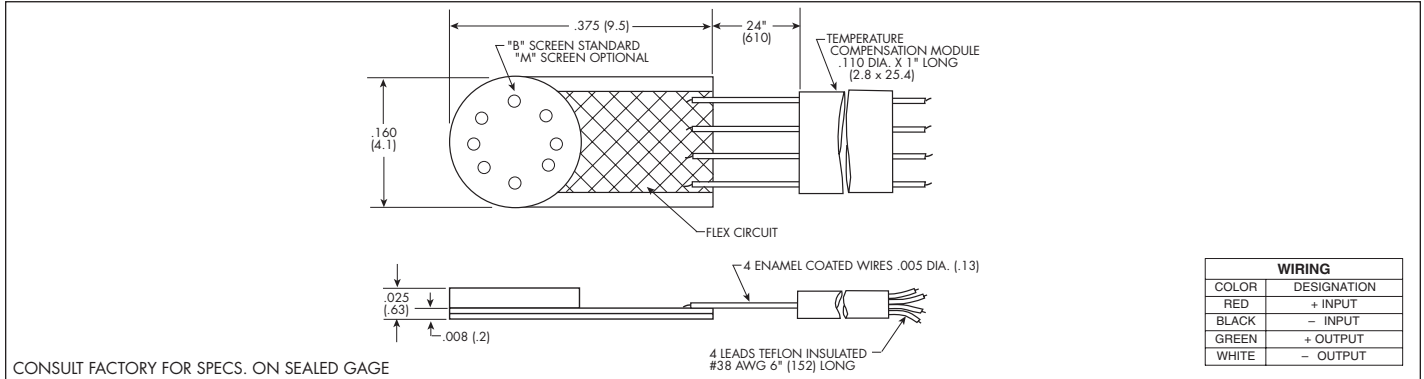


**MICROLINE STRESS ISOLATED SURFACE MOUNT IS<sup>®</sup>**  
**PRESSURE TRANSDUCER**  
**LQ-47 SERIES LE-47 SERIES**

- Designed For Direct Blade Surface Mounting
- Small Size To Maintain Blade Profile
- High G Loading
- Low Base Strain Sensitivity
- High Natural Frequency
- High Temperature Operation Up To 450°F (LE Series)



The LQ/LE-47 Series microline pressure transducer represents the latest build standard in a long line of sensors designed and developed for direct mounting onto engine blades. Using a unique isolation technique to reduce base strain sensitivity effects, the LQ/LE-47 Series are the smallest, lightest units yet developed. With a maximum height of less than 0.025 inch, these units may be mounted in locations on the blade previously inaccessible with a packing density previously impossible.



<b>INPUT</b> Pressure Range	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
Operational Mode	Absolute, Sealed Gage						
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.)						
<b>OUTPUT</b> 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
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>
Base Strain Sensitivity	Less Than 5% FSO for 1000 Microstrain						
Insulation Resistance	100 Megohm Min. @ 50 VDC						
<b>ENVIRONMENTAL</b> 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) LE SERIES +80°F to +450°F (+25°C to +235°C)						
Thermal Zero Shift	± 2.0% FS/100°F (Typ.)						
Thermal Sensitivity Shift	± 2.0% /100°F (Typ.)						
Steady Acceleration	80,000g. (Max.)						
Linear Vibration	10-20,000 Hz Sine, 100g. (Max.)						
<b>PHYSICAL</b> Electrical Connection	(Before Module) 4 x .005 Enamel Coated Wires 24" Long / 38 AWG 6" Long (After Module)						
Weight	.1 Gram (Nom.) Excluding Module and Leads						

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.