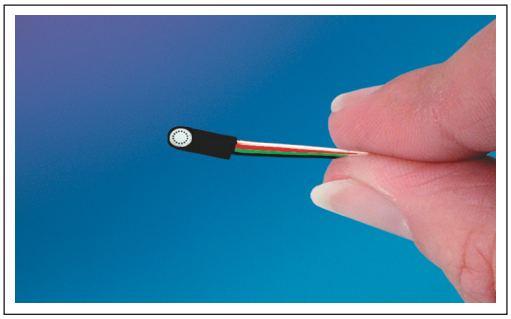
THIN LINE PRESSURE TRANSDUCER

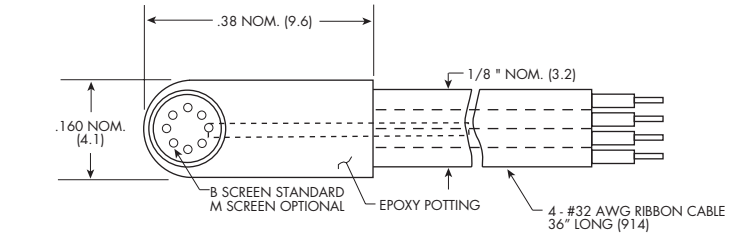
LQ-080 SERIES LQ-125 SERIES

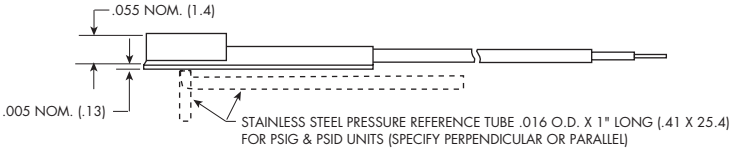
- High Natural Frequency
- Excellent Stability
- Ideal For Flight Test & Wind Tunnel Applications
- Silicon on Silicon Integrated Sensor **VIS**®



The LQ 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.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the LQ-080 and LQ-125 transducers.





WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	– INPUT
GREEN	+ OUTPUT
WHITE	– OUTPUT

INPUT	Pressure Range	.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	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						
	Maximum Electrical Excitation	12 VDC						
	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 of Sensor Without Screen (KHz) (Typ.)	150	175	240	300	380	550	700
	Acceleration Sensitivity % FS/g Perpendicular	$1.5x10^{-3}$	$1.0x10^{-3}$	$5.0x10^{-4}$	$3.0x10^{-4}$	$1.5x10^{-4}$	$1.0x10^{-4}$	$6.0x10^{-5}$
	Insulation Resistance	100 Megohm Min. @ 50 VDC						
ENVIRONMENTAL	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.)						
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)						
	Mechanical Shock	20g half Sine Wave 11 msec. Duration						
PHYSICAL	Electrical Connection	4 Conductor 32 AWG Ribbon Cable 36" Long						
	Weight	.2 Grams (Nom.) Excluding Cable						
	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. All dimensions nominal. (H) Continuous development and refinement of our products may result in specification changes without notice. *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.*

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