

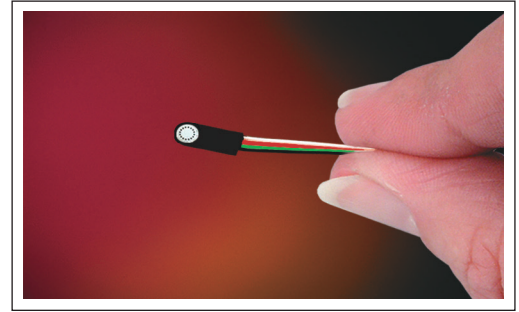


# HIGH TEMPERATURE THIN LINE PRESSURE TRANSDUCER

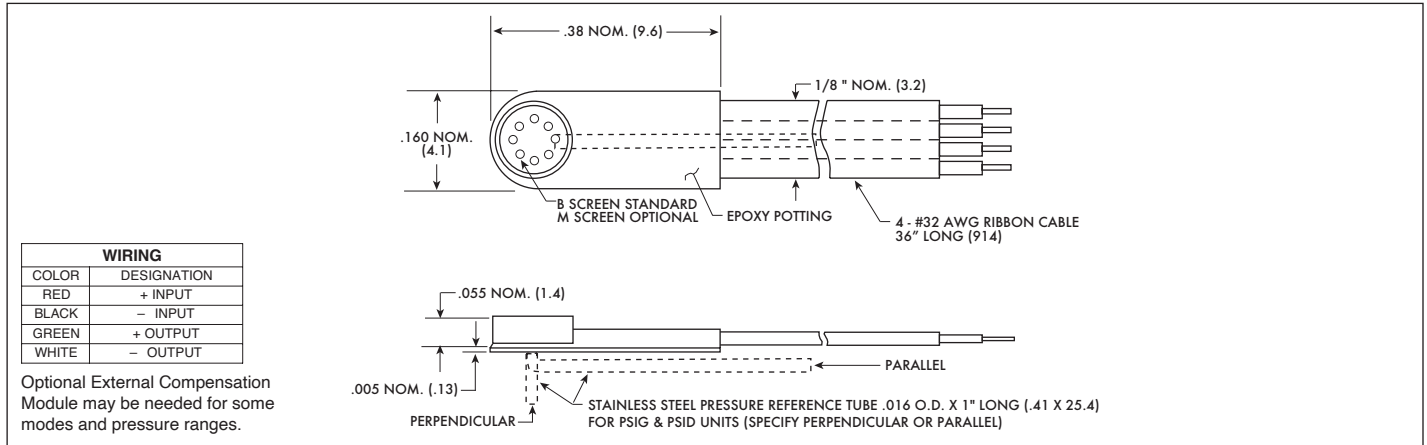
LLHT-080 SERIES LLHT-125 SERIES

- Patented Leadless Technology **VIS**<sup>®</sup>
- Excellent Stability
- High Natural Frequency
- High Temperature Capabilities -65°F To +450°F
- Ideal For Flight Test & Wind Tunnel Applications

The LLHT Series features Kulite's Patented Leadless Technology and 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. Part performance not guaranteed if used in water.



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



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

Optional External Compensation Module may be needed for some modes and pressure ranges.

INPUT	Pressure Range	0.7 10	1 15	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	Absolute			Absolute, Sealed Gage		Absolute, Sealed Gage	
	Over Pressure	2 Times Rated Pressure						
	Burst Pressure	3 Times Rated Pressure						
	Pressure Media	Most Conductive Liquids and Gases (Please Consult Factory)						
	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.)	175	200	240	300	380	550	700
	Acceleration Sensitivity % FS/g Perpendicular	1.0x10 <sup>-3</sup>	6.5x10 <sup>-4</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>
	Insulation Resistance	100 Megohm Min. @ 50 VDC						
ENVIRONMENTAL	Operating Temperature Range	-65°F to +450°F (-55°C to +235°C)						
	Compensated Temperature Range	80°F to +450°F (25°C to +235°C)						
	Thermal Zero Shift	± 3% FS/100°F (Typ.) (± 4% FS/100°F Max)	± 2% FS/100°F (Typ.) (± 3% FS/100°F Max)	± 1% FS/100°F (Typ.) (± 2% FS/100°F Max)				
	Thermal Sensitivity Shift	± 3% /100°F (Typ.) (± 4% /100°F Max)	± 2% /100°F (Typ.) (± 3% /100°F Max)	± 1% /100°F (Typ.) (± 2% /100°F Max)				
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz						
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration						
PHYSICAL	Electrical Connection	4 Conductor 32 AWG Ribbon Cable 36" Long						
	Weight	.2 Gram (Nom.) Excluding Module and Leads						
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology						

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