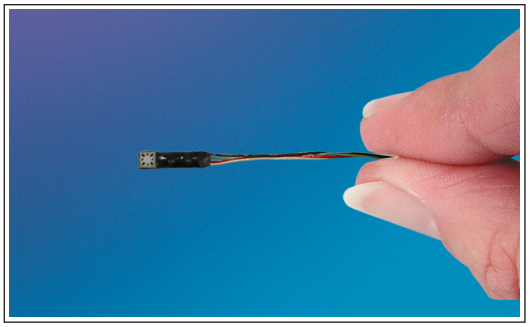
ULTRAMINIATURE THIN LINE PRESSURE TRANSDUCERS

LPS-L-072 SERIES

- Ideal For Flight Test & Wind Tunnel Applications
- Excellent Static And Dynamic Performance
- High Natural Frequency
- Patented Leadless Technology **VIS**®

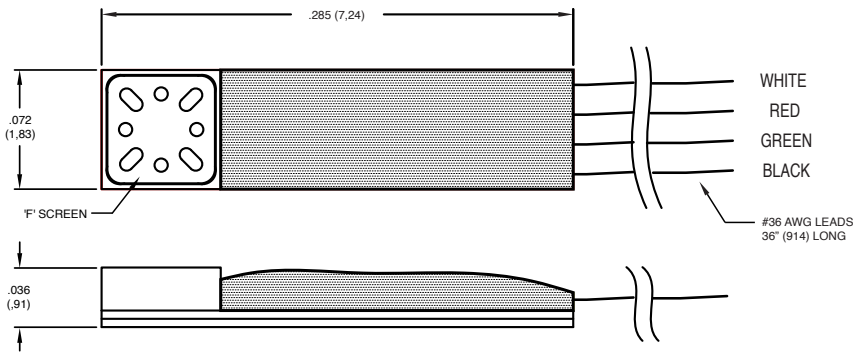


The LPS-L-072 Series features Kulite's Patented Leadless Technology and demonstrates Kulite's ability to provide pressure transducers suited for adaptation into custom packages. These devices can be integrated into various test articles such as fan blades, engine nozzles of various types, etc. The features 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 LPS-L-072 transducer.

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	1.0 15	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	Absolute		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.)	240		300	380	550	700
	Acceleration Sensitivity % FS/g Perpendicular	$5.0x10^{-4}$		$3.0x10^{-4}$	$1.5x10^{-4}$	$1.0x10^{-4}$	$6.0x10^{-5}$
	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)					
	Thermal Zero Shift	± 2% FS/100°F (Typ.); ± 3% FS/100°F (Max.)		± 1% FS/100°F (Typ.); ± 2% FS/100°F (Max.)			
	Thermal Sensitivity Shift	± 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 Leads #36 AWG 36" (914) Long					
	Weight	.2 Gram (Nom.) Excluding 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.

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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