



## MINIATURE HIGH PRESSURE PRESSURE TRANSDUCER

### HKL-1-235M SERIES

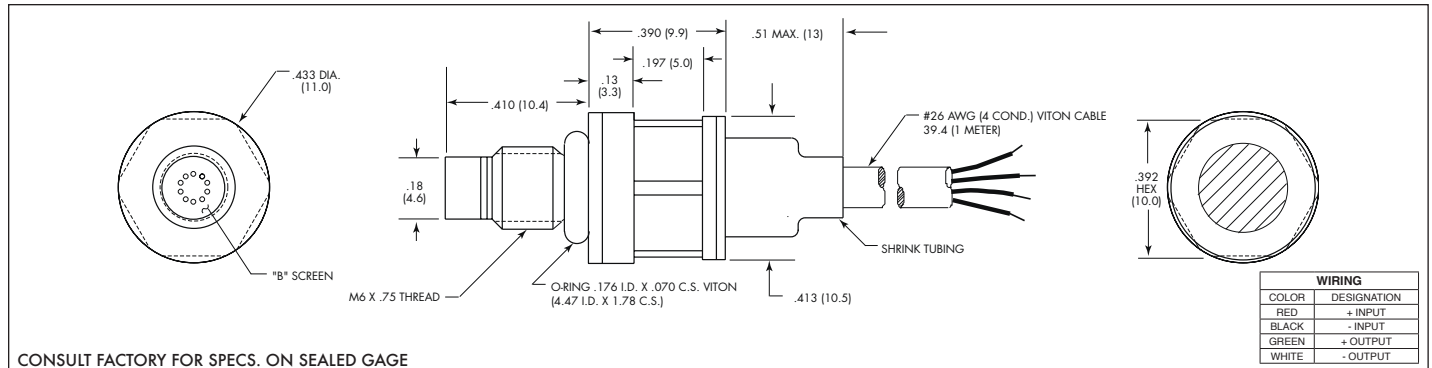
- Patented Leadless Technology VIS®
- Robust Construction
- Excellent Long Term Stability

The HKL-1-235M is a miniature threaded high pressure transducer utilizing Kulite's Patented Leadless Technology. The hexagonal head and o-ring seal make it easy to mount and simple to apply.

This advanced construction results in a highly stable, reliable and rugged instrument with all the advantages of microcircuitry: significant miniaturization, excellent repeatability, low power consumption, etc. The miniaturization process also yields a marked increase in the natural frequencies of the transducers, making them suitable for use even in shock pressure measurements. Part performance not guaranteed if used in water.



Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the HKL-1-235M transducer.



	1.7	3.5	7	17	35	70	170	250 BAR
	25	50	100	250	500	1000	2500	3600 PSI
<b>INPUT</b>								
Pressure Range	1.7	3.5	7	17	35	70	170	250 BAR
Operational Mode	Absolute, Sealed Gage							
Over Pressure	2 Times Rated Pressure							
Burst Pressure	3 Times Rated Pressure							
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)							
Rated Electrical Excitation	10 VDC							
Maximum Electrical Excitation	12 VDC							
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 of Sensor Without Screen (KHz) (Typ.)	240	300	380	550	7000	1000	1500	2000
Acceleration Sensitivity % FS/g Perpendicular	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>	4.0x10 <sup>-5</sup>	2.2x10 <sup>-5</sup>	1.4x10 <sup>-5</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC							
<b>ENVIRONMENTAL</b>								
Operating Temperature Range	-65°F to +350°F (-55°C to +175°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.) (± 2% FS/100°F For 25 PSI Range)							
Thermal Sensitivity Shift	± 1% /100°F (Typ.) (± 2% /100°F For 25 PSI Range)							
Linear Vibration	20g Peak, Sine 10 to 2000 Hz							
Mechanical Shock	20g Half Sine Wave 11 msec. Duration							
<b>PHYSICAL</b>								
Electrical Connection	4 Conductor 26 AWG Viton Cable Without Shielding 1 Meter Long							
Weight	15 Grams (Max.) Excluding Cable							
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology							
Mounting Torque	50 Inch-Pounds (Max.) 6 Nm							

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