

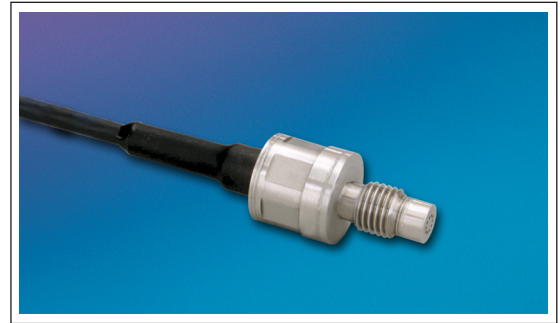


# MINIATURE HIGH PRESSURE PRESSURE TRANSDUCER

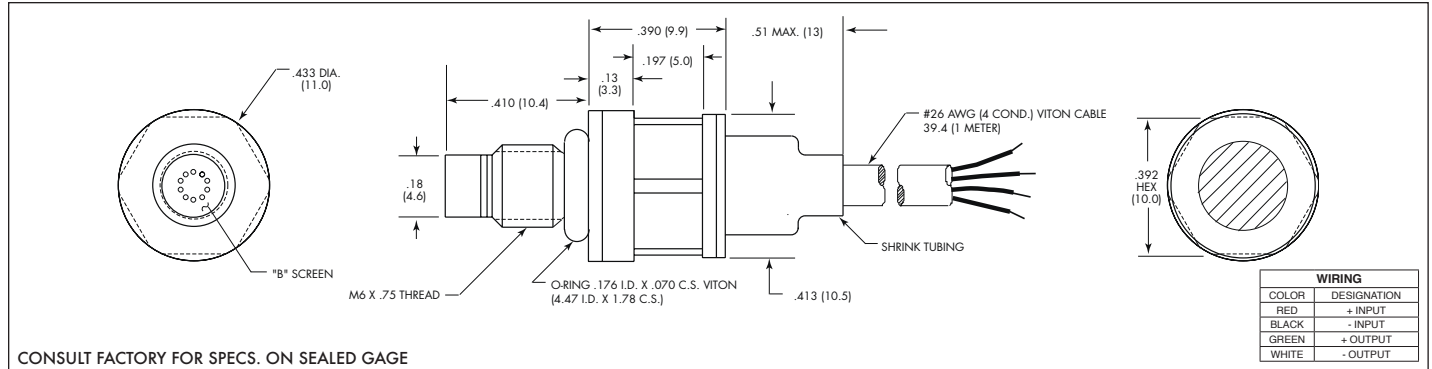
## HKL-1-235 (M) SERIES

- Patented Leadless Technology **VIS**<sup>®</sup>
- Robust Construction
- Excellent Long Term Stability

The HKL-1-235 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.



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



INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	250 BAR 3600 PSI	
	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.)								
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	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									
ENVIRONMENTAL	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	100g Peak, Sine Up to 5000 Hz								
Mechanical Shock	20,000g, 100μ sec.									
PHYSICAL	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. (K) 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.