



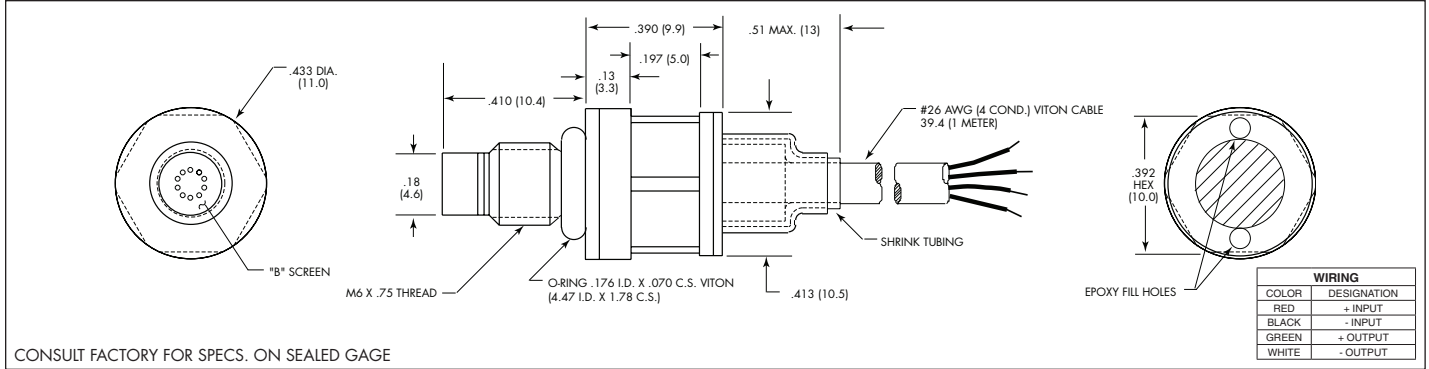
MINIATURE HIGH PRESSURE IS® PRESSURE TRANSDUCER

HKL-1-235 (M) SERIES

- Patented Leadless Technology VIS®
- 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.



| | | | | | | | | |
|--|---|----------------------|----------------------|-----------------------|--------------------------------|----------------------|----------------------|----------------------|
| 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, 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 (Most Conductive Liquids and Gases - Please Consult Factory) | | | | | | | |
| Rated Electrical Excitation | 10 VDC | | | | | | | |
| Maximum Electrical Excitation | 15 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 (KHz) (Typ.) | 240 | 300 | 380 | 550 | 7000 | 1000 | 1500 | 2000 |
| Acceleration Sensitivity % FS/g Perpendicular | 5.0x10 ⁻⁴ | 3.0x10 ⁻⁴ | 1.5x10 ⁻⁴ | 1.0x10 ⁻⁴ | 6.0x10 ⁻⁵ | 4.0x10 ⁻⁵ | 2.2x10 ⁻⁵ | 1.4x10 ⁻⁵ |
| Transverse | 6.0x10 ⁻⁵ | 4.0x10 ⁻⁵ | 2.0x10 ⁻⁵ | 9.0x10 ⁻⁶ | 6.0x10 ⁻⁶ | 3.0x10 ⁻⁶ | 2.2x10 ⁻⁶ | 1.4x10 ⁻⁶ |
| 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 | | | | | | | |
| Humidity | 100% Relative Humidity | | | | | | | |
| 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. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (E)