The HKM/HKL-233(X)-375 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply. The HKM/HKL-233(X)-375 utilizes a flush metal diaphragm as a force collector. A solid state piezoresistive sensing element is located immediately behind this metal diaphragm which is protected by a metal screen. Force transfer is accomplished via an intervening film of non-compressible silicone oil. This sensing sub assembly is welded to a stainless steel body.

The HKM-233(X)-375 utilizes Kulite’s Patented Leadless Technology. A solid state piezoresistive sensing element is protected by a metal screen. This sensing sub assembly is welded to a stainless steel body.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the HKM/HKL-233-375 transducers.

The HKM/HKL-233(X)-375 is a miniature threaded pressure transducer. The miniaturization process also yields a marked increase in the natural frequencies of the transducers, making them suitable for 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.

### Table: HKM/HKL-233(X)-375 (M) Series

<table>
<thead>
<tr>
<th>Pressure Range</th>
<th>Operational Mode</th>
<th>Over Pressure</th>
<th>Burst Pressure</th>
<th>Pressure Media</th>
<th>Rated Electrical Excitation</th>
<th>Maximum Electrical Excitation</th>
<th>Input Impedance</th>
<th>Output Impedance</th>
<th>Full Scale Output (FSO)</th>
<th>Total Error Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7 PSI</td>
<td>Absolute</td>
<td>25</td>
<td>100</td>
<td>All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases-Consult Factory)</td>
<td>10 VDC</td>
<td>12 VDC</td>
<td>1000 Ohms (Min.)</td>
<td>1000 Ohms (Nom.)</td>
<td>100 mV</td>
<td>± 1%</td>
</tr>
<tr>
<td>250 PSI</td>
<td>Absolute, Sealed Gage</td>
<td>500</td>
<td>1000</td>
<td>Any Liquid or Gas Compatible With 15-5 PH or 316 Stainless Steel</td>
<td>12 VDC</td>
<td>1000 Ohms (Nom.)</td>
<td>0 mV</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Environmental
- **Linear Vibration**: 50g Peak, Sine up to 2000 Hz
- **Humidity**: 100% Relative Humidity
- **Altitude**: -150 ft. to +70,000 ft. Will Not Damage Sensor
- **Mechanical Shock**: 100g half Sine Wave 11 msec. Duration
- **Operating Temperature Range**: -65°F to +350°F (-55°C to +175°C)
- **Compensated Temperature Range**: -65°F to +300°F (-55°C to +150°C)
- **Total Error Band**: ± 1% At All Other Temperatures Within The Compensated Range
- **Humidity**: 100% Relative Humidity
- **Altitude**: -150 ft. to +70,000 ft. Will Not Damage Sensor
- **Mechanical Shock**: 100g half Sine Wave 11 msec. Duration
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- **Mechanical Shock**: 100g half Sine Wave 11 msec. Duration

### Physical
- **Electrical Connection**: Option A: D38999/25YA35PN Connector or Equivalent, Option B: PTIH-8-4P Connector or Equivalent, Option C: 4 Conductor 24 AWG Shielded, Thermorad F Jacketed Cable, 40” (1 Meter)
- **Weight**: 17 Grams (Max.) Excluding Cable
- **Pressure Sensing Principle**: Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon (Patented Leadless Technology HKL Series)
- **Mounting Torque**: 80 Inch-Pounds (Max.)

### Technical Details
- **Weight**: 17 Grams (Max.) Excluding Cable
- **Pressure Sensing Principle**: Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon (Patented Leadless Technology HKL Series)
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Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.