# MINIATURE PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

## HKL/T-312 (M) SERIES
- Combined Pressure and Temperature Measurement Capability
- Robust Construction
- Patented Leadless Technology VIS®
- Designed For Industrial and Automotive Applications

The HKL/T-312 (M) is a miniature threaded pressure transducer/platinum RTD combination. The pressure transducer utilizes a patented silicon on silicon design. The platinum RTD protrudes beside the diaphragm to sense media temperature. The pressure and temperature devices are designed to operate independently. All wetted parts of the transducer are compatible with all common industrial and automotive fluids.

Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the HKL/T-312 transducer.

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### PHYSICAL

- **Pressure Sensing Principle:** Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology
- **Mounting Torque:** 50 Inch-Pounds (Max.)

### 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)

### ELECTRICAL

- **RTD:** 1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) In Liquid
- **Residual Unbalance:** ± 5 mV (Typ.)
- **± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)

### PRESSURE

<table>
<thead>
<tr>
<th>Pressure Range</th>
<th>1.7</th>
<th>3.5</th>
<th>7</th>
<th>17</th>
<th>35</th>
<th>50</th>
<th>70</th>
<th>100</th>
<th>170 BAR</th>
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<tbody>
<tr>
<td>Operational Mode</td>
<td>Absolute, Sealed Gage</td>
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<tr>
<td>Over Pressure</td>
<td>3.5</td>
<td>7</td>
<td>14</td>
<td>35</td>
<td>52</td>
<td>105</td>
<td>210 BAR</td>
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<tr>
<td>Burst Pressure</td>
<td>3 Times Rated Pressure</td>
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<tr>
<td>Rated Electrical Excitation</td>
<td>10 VDC</td>
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<tr>
<td>Maximum Electrical Excitation</td>
<td>12 VDC</td>
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<tr>
<td>RTD Excitation</td>
<td>1mA (2mA Max.)</td>
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<tr>
<td>Input Impedance</td>
<td>1000 Ohms (Min.)</td>
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<tr>
<td>Full Scale Output (FSO)</td>
<td>100 mV (Nom.)</td>
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<tr>
<td>RTD</td>
<td>1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) In Liquid</td>
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</table>

### MECHANICAL

- **Mounting Torque:** 50 Inch-Pounds (Max.) 6Nm

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

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