

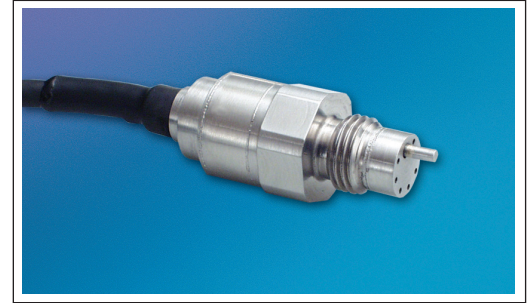


MINIATURE PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

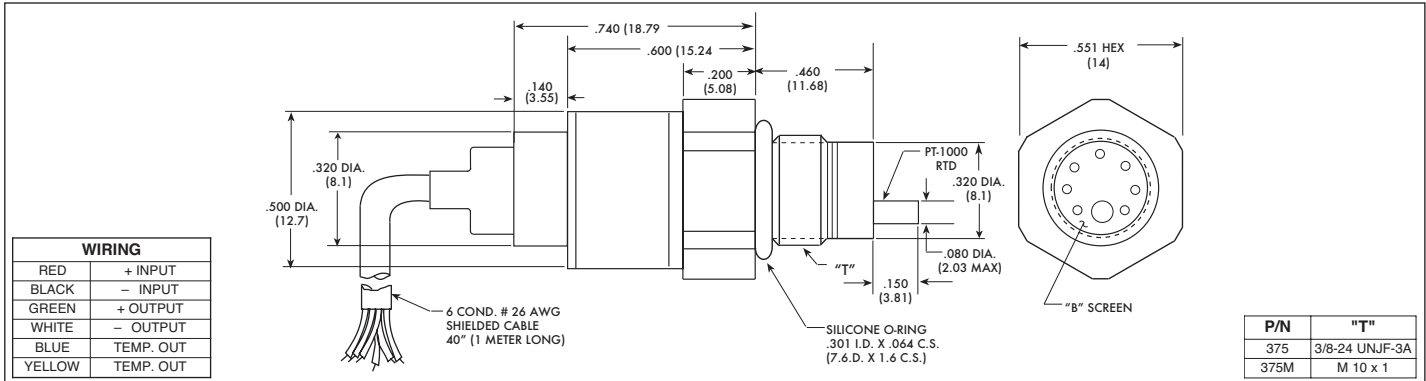
HKL/T-375 (M) SERIES

- Combined Pressure and Temperature Measurement Capability
- Robust Construction
- Patented Leadless Technology **VIS**[®]
- Designed For Industrial and Automotive Applications

The HKL/T-375 (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-375 transducer.



| | | | | | | | | |
|---------------|---|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| INPUT | Pressure Range | 1.7 25 | 3.5 50 | 7 100 | 17 250 | 35 500 | 70 1000 | 170 BAR 2500 PSI |
| | Operational Mode | Absolute, Sealed Gage | | | | | | |
| | Over Pressure | 3.5 50 | 7 100 | 14 200 | 35 500 | 52 750 | 105 1500 | 210 BAR 3000 PSI |
| | Burst Pressure | 3 Times Rated Pressure | | | | | | |
| | Pressure Media | Most Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Supplied) | | | | | | |
| | Rated Electrical Excitation | 10 VDC | | | | | | |
| | Maximum Electrical Excitation | 12 VDC | | | | | | |
| | RTD Excitation | 1mA (2mA Max.) | | | | | | |
| | Input Impedance | 1000 Ohms (Min.) | | | | | | |
| | Output Impedance | 1000 Ohms (Nom.) | | | | | | |
| OUTPUT | Full Scale Output (FSO) | 100 mV (Nom.) | | | | | | |
| | RTD | 1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) In Liquid | | | | | | |
| | 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 | 700 | 1000 | 1400 |
| | Acceleration Sensitivity % FS/g Perpendicular | 5.0x10 ⁻⁴ | 3.0x10 ⁻⁴ | 1.5x10 ⁻⁴ | 1.0x10 ⁻⁴ | 6.0x10 ⁻⁵ | 4.0x10 ⁻⁵ | 2.5x10 ⁻⁵ |
| | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | | |
| | 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 Within The Operating Range on Request | | | | | | |
| ENVIRONMENTAL | Thermal Zero Shift | ± 1% FS/100°F (Typ.) | | | | | | |
| | Thermal Sensitivity Shift | ± 1% /100°F (Typ.) | | | | | | |
| | Steady Acceleration | 10,000 g. (Max.) | | | | | | |
| | Linear Vibration | 10-2,000 Hz Sine, 100g (Max.) | | | | | | |
| PHYSICAL | Electrical Connection | 6 Conductor 26 AWG Shielded Cable 40" (1 Meter) Long | | | | | | |
| | Weight | 12 Grams 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.) 6Nm | | | | | | |

