

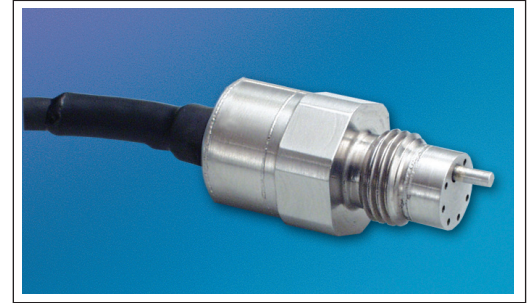


MINIATURE PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

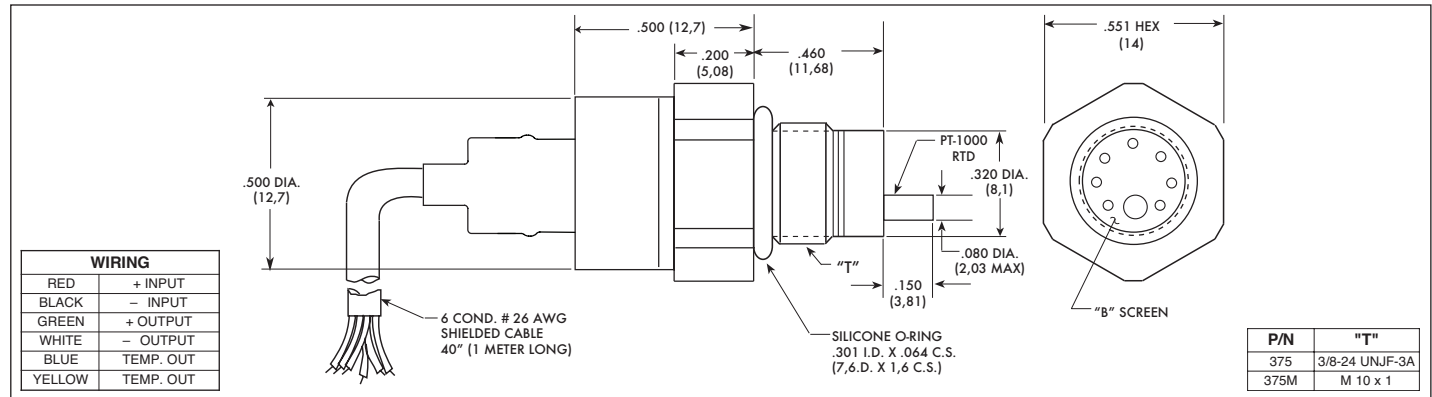
HKL/T-1-375 (M) SERIES

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

The HKL/T-1-375 (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-1-375 transducer.



	1.7	3.5	7	17	35	70	170 BAR
INPUT	25	50	100	250	500	1000	2500 PSI
Pressure Range							
Operational Mode	Absolute, Sealed Gage						
Over Pressure	2 Times Rated Pressure <35 Bar (508 PSI), 1.5 Times Rated Pressure ≥ 35 BAR (508 PSI) to a Max Pressure 3000 PSI (207 BAR)						
Burst Pressure	3 Times Rated Pressure to a Max Pressure 3000 PSI (207 BAR)						
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.)						
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						
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 Within The Operating Range on Request						
Thermal Zero Shift	± 1% FS/100°F (Typ.)						
Thermal Sensitivity Shift	± 1% /100°F (Typ.)						
Steady Acceleration	10,000 g. (Max.)						
Linear Vibration	20g Peak, Sine 10 to 2000 Hz						
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						

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