

MINIATURE HIGH PRESSURE IS® PRESSURE TRANSDUCER

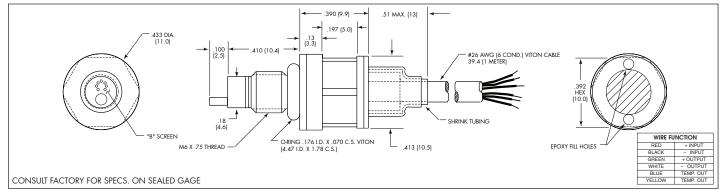
WITH INTEGRATED TEMPERATURE SENSOR

HKL/T-1-235 (M) SERIES

- World's Smallest Pressure and Temperature Sensor at 6mm
- Combined Pressure and Temperature Capability
- Robust Construction
- Patented Leadless Technology VIS®
- Excellent Long Term Stability

The HKL/T-1-235 (M) is a miniature threaded high 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 aircraft and automotive fluids.





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							
RTD Excitation	1mA (2mA Max.)							
Input Impedance	1000 Ohms (Min.)							
OUTPUT 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.)							
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 Transverse	5.0x10 ⁻⁴ 6.0x10 ⁻⁵	3.0x10 ⁻⁴ 4.0x10 ⁻⁵	1.5x10 ⁻⁴ 2.0x10 ⁻⁵	1.0x10 ⁻⁴ 9.0x10 ⁻⁶	6.0x10 ⁻⁵ 6.0x10 ⁻⁶	4.0x10 ⁻⁵ 3.0x10 ⁻⁶	2.2x10 ⁻⁵ 2.2x10 ⁻⁶	1.4x10 ⁻⁵ 1.4x10 ⁻⁶
Insulation Resistance	100 Megohm Min. @ 50 VDC							
ENVIRONMENTAL Operating Temperature Range Compensated Temperature Range	-65°F to +400°F (-55°C to +204°C) -40°F to +350°F (-40°C to +175°C)							
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	6 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.) 6Nm							