



ULTRA HIGH TEMPERATURE AMPLIFIED MINIATURE IS® PRESSURE TRANSDUCER

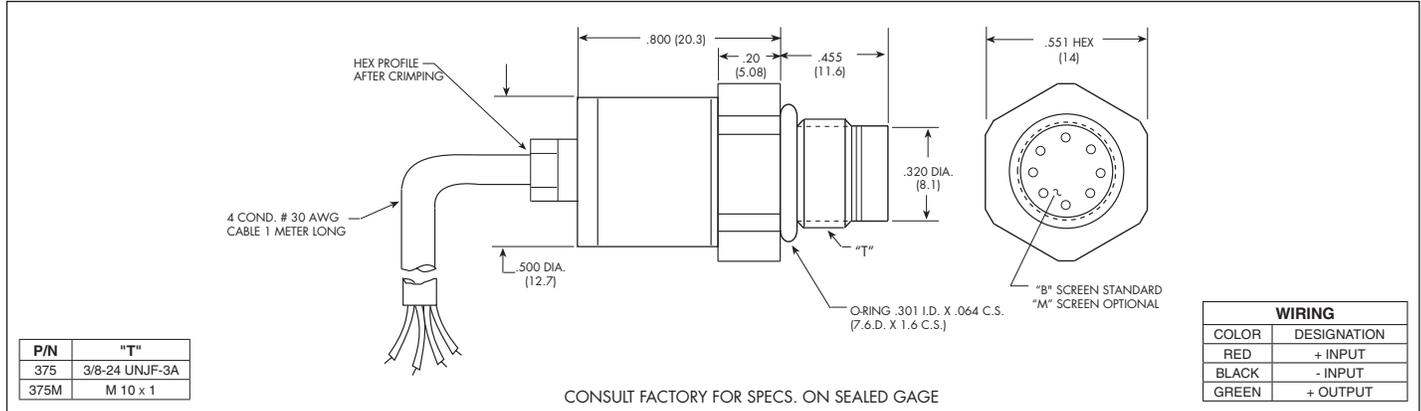
ETL-UHT-375(M)

- Smallest High Performance Amplified Transducer Worldwide
- Highest Temperature Electronics 450°F (232°C)
- Patented Leadless Technology **VIS®**
- High Over Pressure Capability
- High Bandwidth
- Aerospace and Downhole Quality Components
- Designed and Engineered For Severe Environmental Conditions



The ETL-UHT-375M is one of the newest generation of Kulite standard, smallest ultra high temperature miniature amplified transducer currently available. The device incorporates Silicon on Insulator (SOI) Sensor and Electronics, thus enabling operation up to 450°F (232°C). The ETL Series uses Kulite's Patented Leadless Technology. This sensing sub-assembly is protected from mechanical damage by a protective screen, which has been

shown to have minimal influence of the frequency response of the sensor. Incorporation of Kulite proprietary high temperature 450°F (232°C) electronics within the main body allows for operation from an unregulated power supply of 10 to 36 VDC.



INPUT	1.7 to 70 BAR 25 to 1000 PSI
Pressure Range	
Operational Mode	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 - 18 or 18 - 36 VDC
Maximum Electrical Current	10 mA (Max.)
OUTPUT	
Output Impedance	15 Ohms (Typ.)
Output	.5 to 4.5 V ± 1.5% (Other Ranges Available)
Bandwidth (-3dB)	DC to 15 KHz
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.25% FSO (Max.)
Resolution	Infinitesimal
Acceleration Sensitivity % FS/g Perpendicular	< 3.0x10 ⁻⁵
Transverse	< 4.0x10 ⁻⁶
Insulation Resistance	> 100 Megohm Min. @ 50 VDC
ENVIRONMENTAL	
Operating Temperature Range	-65°F to +450°F (-55°C to +232°C)
Compensated Temperature Range	+75°F to +450°F (+24°C to +232°C) Other Ranges Quoted on Request
Thermal Zero Shift	± 1% FS/100° F (Typ.)
Thermal Sensitivity Shift	± 1% /100° F (Typ.)
Linear Vibration	100g Peak, Sine up to 5000 Hz
Altitude	-150 ft. to +70,000 ft. Will Not Damage Sensor
Humidity	100% Relative Humidity
Mechanical Shock	100g half Sine Wave 11 msec. Duration
PHYSICAL	
Electrical Connection	3 Conductor 30 AWG High Temperature Protective Braided Shield Over Cable 1 Meter Long
Weight	17 Grams (Max.) Excluding Cable
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology
Mounting Torque	75 Inch-Pounds (Max.) 6Nm

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. Continuous development and refinement of our products may result in specification changes without notice. Dimensions shown are typical.