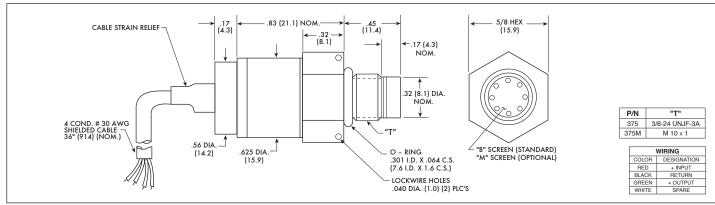
## **EXAMPLE 2** HIGH TEMPERATURE 5 VDC OUTPUT PRESSURE TRANSDUCER

## ETL-HT-375 (M) SERIES

- 5 VDC Output
- 350°F Temperature Capability
- Hybrid Microelectronic
- Regulator-Amplifier
- Patented Leadless Technology
- All Welded Construction
- Secondary Containment On
- Absolute And Sealed Gage Units
- 3/8-24 UNJF or M10 X 1 Thread
- 3 Wire

ETL-HT-375 Series transducers are miniature, threaded flush instruments. The sensing sub-assembly is protected from mechanical damage by a solid screen which has been shown to have minimal influence on the frequency response of the sensor. The ETL Series uses Kulite's Patented Leadless Technology. Incorporation

of a Kulite proprietary electronics module within the main body of this product allows for operation from an unregulated power supply of  $12 \pm 4$  VDC or  $28 \pm 4$  VDC. Standard output is a stable, low noise 0 to 5 VDC signal. Part performance not guaranteed if used in water.



INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 BAR 250 PSI
	Operational Mode	Absolute, Sealed Gage			
	Over Pressure	2 Times Rated Pressure			
	Burst Pressure	3 Times Rated Pressure			
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Suppied)			
	Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC			
	Maximum Electrical Current	25 mA			
OUTPUT	Output Impedance	200 Ohms (Max.)			
	Full Scale Output (FSO)	5 V ± 3%			
	Bandwidth (-3dB)	DC to 3 KHz			
	Residual Unbalance	200 mV ± 50 mV			
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)			
	Resolution	Infinitesimal			
	Natural Frequency (KHz) (Typ.)	Greater Than 175 KHz			
	Acceleration Sensitivity % FS/g Perpendicular	1.9x10 <sup>-3</sup>	1.0x10 <sup>-3</sup>	5.2x10 <sup>-4</sup>	2.2x10 <sup>-4</sup>
	Insulation Resistance	100 Megohm Min. @ 50 VDC			
ENVIRONMENTAL	Operating Temperature Range	-65°F to +350°F (-55°C to +175°C)			
	Compensated Temperature Range	-40°F to +350°F (-40°C to +175°C) Other Ranges Quoted on Request			
	Thermal Zero Shift	± 1% FS/100° F (Typ.)			
	Thermal Sensitivity Shift	± 1% /100° F (Typ.)			
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz			
	Altitude	-150 ft. to +70,000 ft. Will Not Damage Sensor			
	Humidity	100% Relative Humidity			
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration			
PHYSICAL	Electrical Connection	4 Conductor 30 AWG Shielded Cable 36" Long			
	Weight	24.5 Grams (Max.) Excluding Cable			
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology			
Ч	Mounting Torque	80 Inch-Pounds (Max.)			

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (K) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2019 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.

