



5 VDC OUTPUT PRESSURE TRANSDUCER

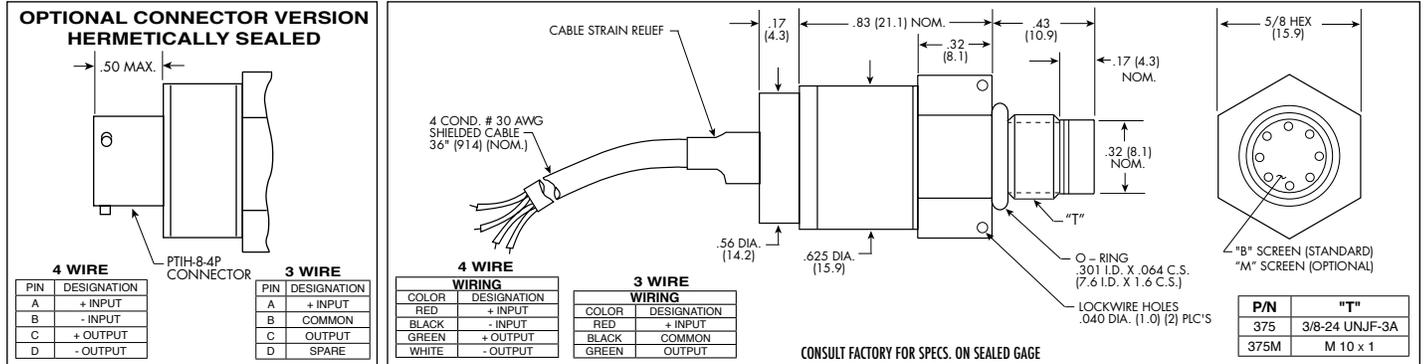
ETL-375 (M) SERIES

- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- Patented Leadless Technology **VIS**[®]
- All Welded Construction
- Secondary Containment On Absolute And Sealed Gage Units
- Aerospace Quality Components
- 3/8-24 UNJF or M10 X 1 Thread
- 4 Wire (ETL-375) 3 Wire (ETL-300-375)



ETL-375 Series transducers are miniature, threaded 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 ranging from $12 \pm 4\text{VDC}$ or $28 \pm 4\text{VDC}$ with reverse polarity protection available upon request.



INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI	
	Operational Mode	Absolute, Gage, Sealed Gage								
	Over Pressure	2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 6000 PSI (420 BAR)								
	Burst Pressure	3 Times Rated Pressure to a Max. of 10000 PSI (700 BAR)								
	Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)								
	Maximum Electrical Current	25 mA								
	Rated Electrical Excitation	8 - 16 VDC				13 - 32 VDC				
OUTPUT	Full Scale Reading	5 VDC \pm 150 mV				5 VDC \pm 150 mV or 10 VDC \pm 300 mV				
	Output Impedance	200 Ohms (Max.)								
	Bandwidth (-3dB)	DC to 5 KHz								
	Residual Unbalance	0 to 100 mV (ETL-375)				200 mV \pm 50 mV (ETL-300-375)				
	Combined Non-Linearity, Hysteresis and Repeatability	\pm 0.1% FSO BFSL (Typ.), \pm 0.5% FSO (Max.)								
	Resolution	Infinitesimal								
	Natural Frequency of Sensor Without Screen (KHz) (Typ.)	Greater Than 400 KHz								
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	1.9×10^{-3}	1.0×10^{-3}	5.2×10^{-4}	2.2×10^{-4}	1.1×10^{-4}	6.2×10^{-5}	2.6×10^{-5}	1.5×10^{-5}	
	Insulation Resistance	100 Megohm Min. @ 50 VDC								
	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)								
	Compensated Temperature Range	0°F to +212°F (-18°C to +100°C) Other Ranges Quoted on Request								
	Thermal Zero Shift	\pm 1% FS/100° F (Typ.)								
	Thermal Sensitivity Shift	\pm 1% /100° F (Typ.)								
	Linear Vibration	100g Peak, Sine up to 5000 Hz								
Mechanical Shock	100g 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								
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. (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.