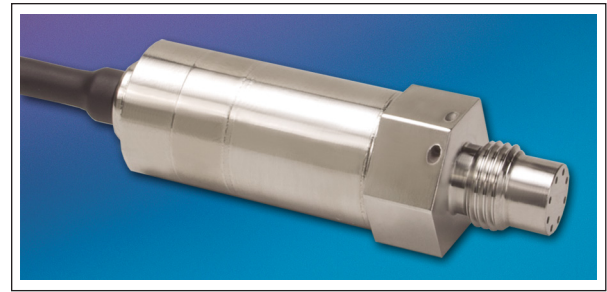




5 VDC OUTPUT PRESSURE TRANSDUCER ETM/ETL-422(X)-375 (M) SERIES

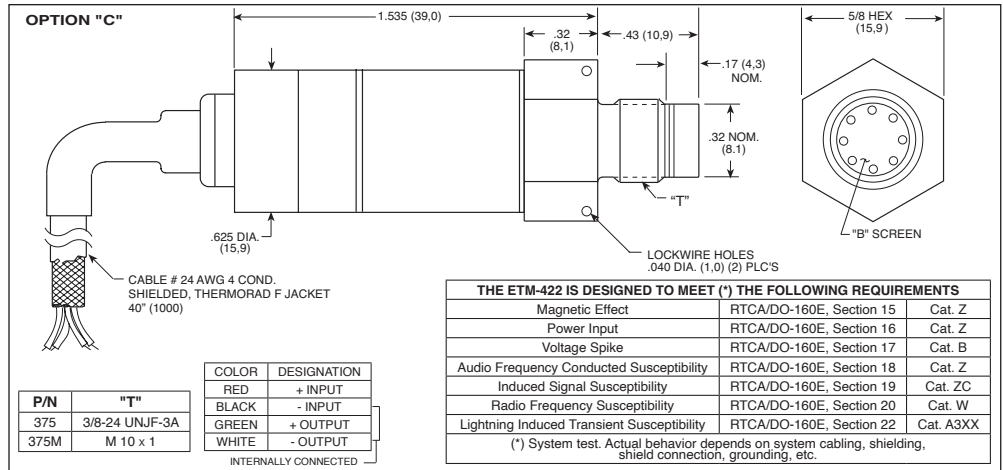
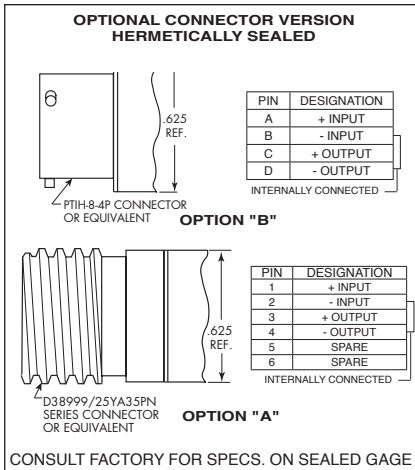
- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- All Welded Construction
- Hermetic Sealed Package
- Aerospace Quality Components
- "X" Identifies Electrical Connection Option
- Thermorad Jacket Compatible With Most Aircraft Fluids
- Patented Leadless Technology VIS® (ETL Series)
- Intrinsically Safe Applications Available (i.e. IS-ETM-422(X)-375)



The ETM/ETL-422(X)-375 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply. The ETM-422(X)-375 utilizes a flush metal diaphragm as a force collector. A solid state piezoresistive sensing element is located immediately behind this metal diaphragm which is protected by a metal screen. Force transfer is accomplished via an intervening film of non-compressible silicone oil. This sensing sub assembly is welded to a stainless steel body. The ETL-422(X)-375 utilizes Kulite's Patented Leadless Technology. A solid state piezoresistive sensing element is protected by a metal screen. This sensing sub assembly is welded to a stainless steel body. This advanced construction results in a highly stable, reliable and rugged instrument with all the advantages

of microcircuitry: significant miniaturization, excellent repeatability, low power consumption, etc. The miniaturization process also yields a marked increase in the natural frequencies of the transducers, making them suitable for use even in shock pressure measurements. Incorporation of a Kulite proprietary electronics module within the main body of this product allows for operation from an unregulated power supply of 16 to 32 VDC. Standard output is a stable, low noise 0.25 to 5 VDC signal.

Part performance not guaranteed if used in water (ETL only).



	ETL				ETM				
	1.7 25	3.5 BAR 50 PSI	7 100	17 250	35 500	70 1000	140 2000	210 3000	350 BAR 5000 PSI
INPUT	Pressure Range		Absolute, Sealed Gage						
	Operational Mode		Absolute						
	Over Pressure		2 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)						
	Burst Pressure		3 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)						
	Pressure Media		All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases-Consult Factory)			Any Liquid or Gas Compatible With 15-5 PH and 316 Stainless Steel			
	Rated Electrical Excitation		16 to 32 VDC						
	Maximum Electrical Current		25 mA						
OUTPUT	Output Impedance		200 Ohms (Max.)						
	Full Scale Reading		5 VDC						
	Bandwidth (-3dB)		DC to 5 KHz						
	Residual Unbalance		250 mV						
	Resolution		Infinitesimal						
	Insulation Resistance		100 Megohm Min. @ 50 VDC						
ENVIRONMENTAL	Operating Temperature Range		-65°F to +275°F (-55°C to +135°C)						
	Compensated Temperature Range		-65°F to +250°F (-55°C to +120°C)						
	Total Error Band		± 2% FSO +32°F to 180°F (0°C to +85°C) Increasing to ± 3% At All Other Temperatures Within The Compensated Range (TEB Includes: Non-linearity, Non-repeatability, Hysteresis, End Point Settings, Temperature Effects on Zero and Span Within the Compensated Range)						
	Linear Vibration		20g Peak, Sine 10 to 2000 Hz						
	Altitude		Unaffected						
	Humidity		100% Relative Humidity						
	Mechanical Shock		20g half Sine Wave 11 msec. Duration						
PHYSICAL	Electrical Connection		OPTION A: D38999/25YA35PN Connector or Equivalent, OPTION B: PTH-8-4P Connector or Equivalent, OPTION C: 4 Conductor 24 AWG Shielded, Thermorad F Jacketed Cable, 40" (1000)						
	Weight		80 Grams (Max.) Including Cable or Connector						
	Pressure Sensing Principle		Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon (Patented Leadless Technology ETL Series)						
	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. (X) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.