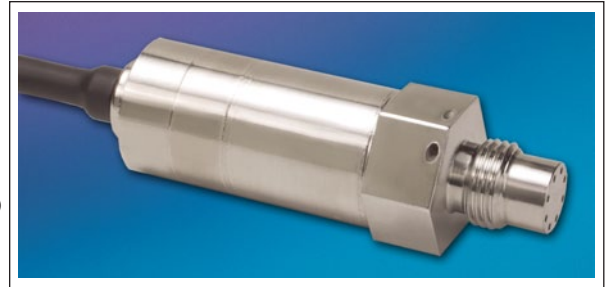




5 VDC OUTPUT IS® PRESSURE TRANSDUCER

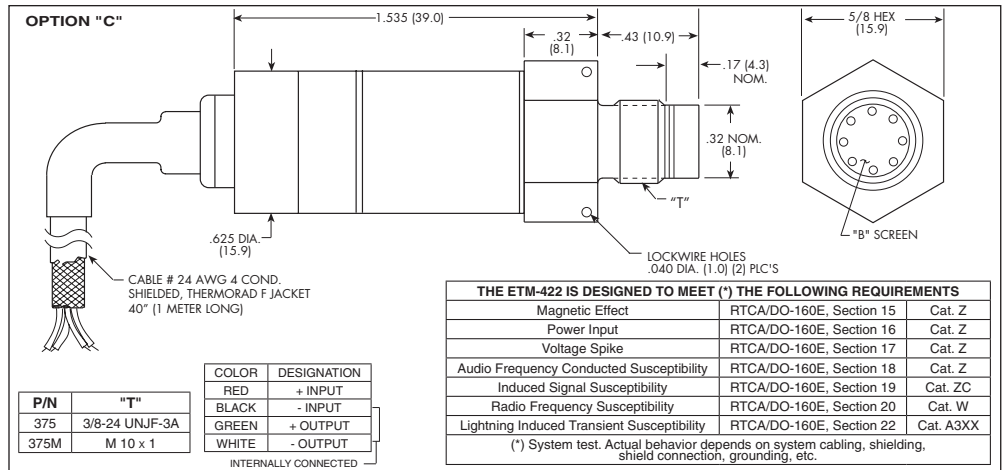
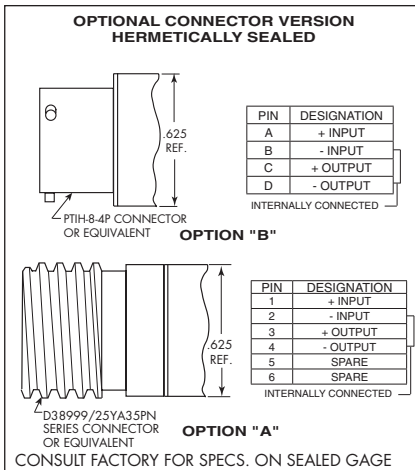
ETM/ETL-422(X)-375 (M) SERIES

- 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 All 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 18 to 36 VDC. Standard output is a stable, low noise 0.25 to 5 VDC signal.



INPUT Pressure Range	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
Operational Mode	Absolute		Absolute, Sealed Gage						
Over Pressure	2 Times Rated Pressure to a Max. of 30000 PSI (2100 BAR)								
Burst Pressure	3 Times Rated Pressure to a Max. of 35000 PSI (2400 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 or 316 Stainless Steel					
Rated Electrical Excitation	18 to 36 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								
Linear Vibration	50g Peak, Sine up to 2000 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	OPTION A: D38999/25YA35PN Connector or Equivalent, OPTION B: PTIH-8-4P Connector or Equivalent, OPTION C: 4 Conductor 24 AWG Shielded, Thermorad F Jacketed Cable, 40" (1 Meter)								
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: Only pressure ranges specified above are available for this product. Dimensions are in inches. Dimensions in parenthesis are in millimeters. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (K)