RATIOMETRIC OUTPUT PRESSURE TRANSDUCER

ETM-435-375(M) SERIES ETM-435-375(M) CO SERIES

- **Ratiometric Amplified Output** •
- Hybrid Microelectronic Amplifier
- Flush Diaphragm •
- All Welded Construction
- Secondary Containment On Absolute And Sealed Gage Units
- 3/8-24 UNJF or M10 X 1 Thread •
- Designed For Industrial and Automotive Applications
- Intrinsically Safe Applications Available (i.e. IS-ETM-435(X)-375)





The ETM-435-375 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply.

The ETM-435-375 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 non-compressible silicone oil. This sensing sub assembly is welded to a stainless steel body.

Incorporation of a Kulite proprietary electronics module within the main body of this product allows for operation from a ratiometric power supply of 5 VDC. Standard output is a stable, low noise 0.5 to 4.5 VDC signal.

	OPTIONAL CONNECTOR VERSION (CH HERMETICALLY SEALED	ico) 1.0 (25.4)
	Pressure Range	3.5 7 10 17 35 50 70 170 350 700 BAR 50 100 145 350 500 725 1000 2500 5000 10000 PSI
	Operational Mode	Absolute, Sealed Gage
5	Over Pressure	2 Times Rated Pressure
INPUT	Burst Pressure	3 Times Rated Pressure
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 Stainlesss Steel (All Media May Not Be Suitable With O-Ring Supplied)
	Maximum Electrical Current	20 mA
	Rated Electrical Excitation	5 VDC ± 0.25 VDC
	Output	0.5 to 4.5 VDC Ratiometric
	Output Impedance	200 Ohms (Max.)
OUTPUT	Bandwidth (-3dB)	DC to 3 KHz
	Accuracy (Total Error Band) Combined Non-Linearity &Hysteresis & Temperature & End Point Settings	± 2.7%
	Resolution	Infinitesimal
	Acceleration Sensitivity % FS/g Perpendicular	3.0x10 ⁻⁴ 1.5x10 ⁻⁴ 2.8x10 ⁻⁴ 2.2x10 ⁻⁴ 1.1x10 ⁻⁴ 8.0x10 ⁻⁵ 6.2x10 ⁻⁵ 2.6x10 ⁻⁵ 1.5x10 ⁻⁵ 1.3x10 ⁻⁵
TAL	Insulation Resistance	100 Megohm Min. @ 50 VDC
	Operating Temperature Range	-40°F to +275°F (-40°C to +135°C)
EN	Compensated Temperature Range	-13°F to +275°F (-25°C to +135°C) Other Ranges Quoted on Request
NN	Linear Vibration	100g Peak, Sine up to 5000 Hz
ENVIRONMENTAL	Humidity	100% Relative Humidity
EN	Mechanical Shock	20g half Sine Wave 11 msec. Duration
AL	Electrical Connection	4 Conductor 26 AWG Shielded Cable, 36" Long CONNECTOR OPTION: PTIH-8-4P Connector or Equivalent
SIC	Weight	24.5 Grams (Max.) Excluding Cable
PHYSICAL	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon
"	Mounting Torque	80 Inch-Pounds (Max.) 9 Nm
Note	Custom processor repairs accuracies and m	- nechanical configurations available - Dimensions are in inches - Dimensions in parenthesis are in millimeters

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 - all dimensions nominal. (B)

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.