

## **NIATURE 4-20mA OUTPUT PRESSURE TRANSMITTER**

## **ETQ-13-375(M) SERIES**

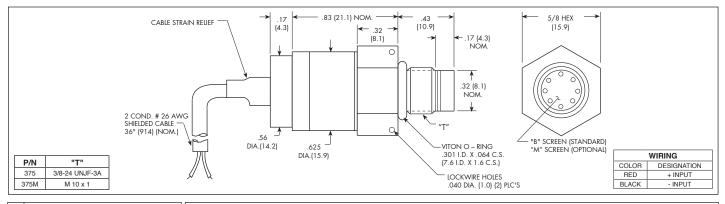
- 4-20mA Output
- 2 Wire Operation
- Hybrid Microelectronic Signal Conditioner
- Flush Diaphragm Coupled With Protective Screen
- All Welded Construction
- Silicon on Silicon Integrated Sensor VIS®
- Qualified Configuration For Industrial Applications
- **Economically Designed For OEM Applications**
- 3/8-24 UNJF or M10 X 1 Thread
- Intrinsically Safe Applications Available (IS-ETQ-13-375)



The ETQ-13-375 Series of miniature pressure transmitters are flush diaphragm units utilizing a Kulite Piezoresistive Sensor as the sensing element.

Mounted within the body of the transducer is a hybrid regulator-amplifier which provides a

stable, low noise 4-20mA output, with a 12 - 32 VDC unregulated input. The flush diaphragm is protected against mechanical damage by a screen which is standard.



INPUT	Pressure Range	17 250	70 1000	350 5000	700 BAR 10000 PSI
	Operational Mode	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 25000 PSI (1724 BAR)			
	Burst Pressure	3 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)			
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 SS (All Media May Not Be Suitable With O-Ring Supplied)			
	Minimum Voltage Required	9 V Minimum Voltage Required Across The Input and Output Wires			
	Rated Electrical Excitation	12 - 32 VDC			
OUTPUT	Output	4 - 20 mA			
	Bandwidth (-3dB)	DC to 750 Hz			
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)			
	Resolution	Infinitesimal			
	Natural Frequency of Sensor Without Screen (KHz) (Typ.)	Greater Than 400 KHz			
	Acceleration Sensitivity % FS/g Perpendicular	2.2x10 <sup>-4</sup>	6.2x10 <sup>-5</sup>	1.5x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>
	Insulation Resistance	100 Megohm Min. at 50 VDC			
PHYSICAL ENVIRONMENTAL	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C) (Max.)			
	Compensated Temperature Range	0°F to +212°F (-18°C to +100°C) Other Ranges Quoted on Request			
	Thermal Zero Shift	± 2% FS/100°F (Typ.)			
	Thermal Sensitivity Shift	± 2% /100°F (Typ.)			
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz			
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration			
	Electrical Connection	2 Conductor 26 AWG Shielded Cable 36" Long			
	Weight	24.5 Grams Excluding Cable			
	Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon			
<u>-</u>	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. (O) 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.