## **MINIATURE 4-20mA OUTPUT IS® PRESSURE TRANSDUCER**

## **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 transducers 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.



CABLE STRAIN RELIEF  2 COND. # 30 AWG SHIELDED CABLE 36" (914) (NOM.)	(4.3) 32 (8.1) O	43   5/8 HEX   (15.9)	
P/N "T"	DIA.(15.9)	.301 I.D. X .064 C.S. (7.6 I.D. X 1.6 C.S.)	WIRING
375 3/8-24 UNJF-3A		, ,	COLOR DESIGNATION
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375M M 10 x 1	CONSULT FACTORY FOR SPECS. ON SEALED GAGE	.040 DIA. (1.0) (2) PLC'S	BLACK - INPUT

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 30000 PSI (2100 BAR)					
Burst Pressure	3 Times Rated Pressure to a Max. of 30000 PSI (2100 BAR)					
Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 SS					
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	Greater Than 400 KHz					
Acceleration Sensitivity % FS/g Perpendicular Transverse	2.2x10 <sup>-4</sup> 1.0x10 <sup>-5</sup>	6.2x10 <sup>-5</sup> 4.3x10 <sup>-6</sup>	1.5x10 <sup>-5</sup> 1.5x10 <sup>-6</sup>	1.3x10 <sup>-5</sup> 1.3x10 <sup>-6</sup>		
Insulation Resistance	100 Megohm Min. at 50 VDC					
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	100g Peak, Sine up to 5000 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	2 Conductor 30 AWG Shielded Cable 36" Long					
Weight	24.5 Grams Excluding Cable					
Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon					
Mounting Torque	80 Inch-Pounds (Max.)					