



# MINIATURE 4-20mA OUTPUT PRESSURE TRANSDUCER

## ETM-200-375 (M) SERIES

- 4-20mA Output
- 2 Wire Operation
- Hybrid Microelectronic Signal Conditioner
- Silicon on Silicon Integrated Sensor **VIS®**
- Flush Diaphragm
- All Welded Construction
- Secondary Containment On Absolute And Sealed Gage Units
- Aerospace Quality Components
- 3/8-24 UNJF or M10 X 1 Thread
- Intrinsically Safe Applications Available (i.e. IS-ETM-200-375)



ETM-200-375 and ETM-200-375M transducers employ the same approach to transducer construction as the standard ETM-375 and ETM-375M series. The Kulite proprietary electronics module in this product line, however, provides a current output signal (4 to 20

mA). These instruments are an excellent choice for applications requiring the current output signal but in which space and/or weight are at a premium.

**OPTIONAL CONNECTOR VERSION HERMETICALLY SEALED**

PIN	DESIGNATION
A	+ INPUT
B	- INPUT

P/N	"T"
375	3/8-24 UNJF-3A
375M	M 10 x 1

CONSULT FACTORY FOR SPECS. ON SEALED GAGE

WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	- INPUT

INPUT	Pressure Range	17 250	35 500	70 1000	170 2500	350 5000	700 10000	1400 BAR 20000 PSI	
	Operational Mode	Absolute, Gage, 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 35000 PSI (2400 BAR)							
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 Stainless Steel							
	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>	1.1x10 <sup>-4</sup>	6.2x10 <sup>-5</sup>	2.6x10 <sup>-5</sup>	1.5x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	8.0x10 <sup>-6</sup>	
ENVIRONMENTAL	Insulation Resistance	100 Megohm Min. @ 50 VDC							
	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)							
	Compensated Temperature Range	0°F to +212°F (-18°C to +100°C) Other Ranges Quoted on Request							
	Thermal Zero Shift	± 1% FS/100° F (Typ.)							
	Thermal Sensitivity Shift	± 1% /100° F (Typ.)							
	Linear Vibration	100g Peak, Sine up to 5000 Hz							
PHYSICAL	Mechanical Shock	100g half Sine Wave 11 msec. Duration							
	Electrical Connection	2 Conductor 26 AWG Shielded Cable 36" Long							
	Weight	24.5 Grams (Max.) Excluding Cable							
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							
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. (M) 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.