



# MINIATURE 5V OUTPUT PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

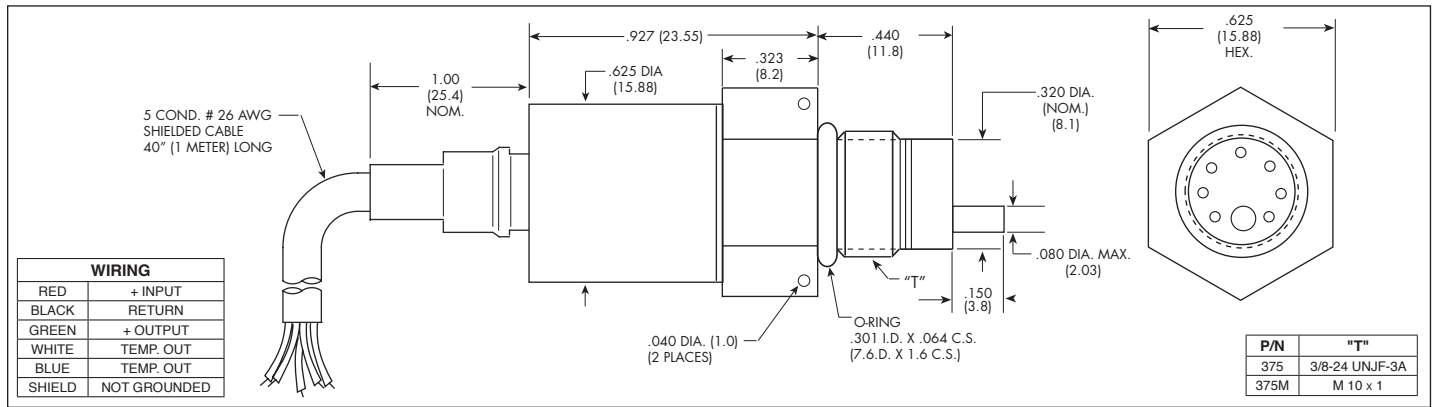
## ETL/T-375 (M) SERIES

- Combined Pressure and Temperature Measurement Capability
- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- Flush Diaphragm
- Robust Construction
- Patented Leadless Technology **VIS**<sup>®</sup>
- All Welded Construction
- Designed For Automotive Applications
- Secondary Containment On Absolute And Sealed Gage Units
- 3/8-24 UNJF or M10 X 1 Thread



The ETL/T-375 is a miniature threaded pressure transducer/platinum RTD combination. The pressure transducer utilizes a patented silicon on silicon design. The platinum RTD protrudes beside the diaphragm to sense media temperature. The pressure and temperature devices are designed to operate

independently. All wetted parts of the transducer are compatible with most industrial and automotive fluids. Part performance not guaranteed if used in water.



INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	250 BAR 3600 PSI	
	Operational Mode	Absolute		Absolute, 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 6000 PSI (420 BAR)										
	Burst Pressure	3 Times Rated Pressure										
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Supplied)										
	Maximum Electrical Current	25 mA										
	Rated Electrical Excitation	8 - 32 VDC										
	RTD Excitation	1mA (2mA Max.)										
OUTPUT	Full Scale Reading	5 VDC ± 75mV (3 Wire System Single Ended Output)										
	Residual Unbalance	0.5V ± 75mV										
	Output Impedance	200 Ohms (Typ.)										
	RTD	1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) in Liquid										
	Bandwidth (-3dB)	DC to 5 kHz										
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.)										
ENVIRONMENTAL	Resolution	Infinitesimal										
	Acceleration Sensitivity % FS/g Perpendicular	1.0x10 <sup>-3</sup>	6.5x10 <sup>-4</sup>	5.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>	4.0x10 <sup>-5</sup>	2.5x10 <sup>-5</sup>	1.7x10 <sup>-5</sup>	
	Insulation Resistance	100 Megohm Min. @ 50 VDC										
	Operating Temperature Range	-4°F to +257°F (-20°C to +125°C)										
	Compensated Temperature Range	+32°F to +212°F (0°C to +100°C)										
	Thermal Zero Shift	± 1% FS/100°F (Typ.)										
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)										
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz										
Mechanical Shock	20g Half Sine Wave 11 msec. Duration											
PHYSICAL	Electrical Connection	5 Conductor 26 AWG Shielded Cable 40" (1 Meter) Long										
	Weight	20 Grams Excluding Cable										
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology										
	Mounting Torque	50 Inch-Pounds (Max.) 6Nm										

Note: Custom pressure ranges, accuracies, mechanical configurations and RTD resistance 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.