

WATER/AIR COOLED 5VDC OUTPUT TRANSDUCER

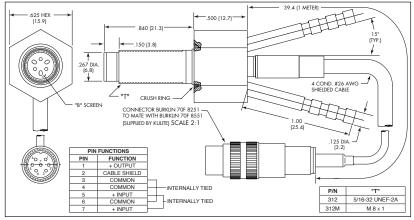
EWCTV-312 (M)

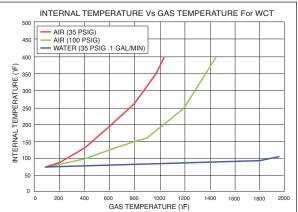
- · High Bandwidth With Integrated Amplifier
- Patented Leadless Technology VIS®
- · Superior Thermal Protection
- · Both Dynamic and Static Output Capabilities
- Extreme Temperature Capabilities Such As Required In Exhaust Systems

Kulite introduces a new compact Water Cooled Pressure Transducer for both dynamic and static pressure measurements in extreme temperature environments such as automotive and turbine exhaust systems. The EWCTV-312 combines Kulite's patented Leadless Silicon Technology and a Miniature Water Cooled Jacket to provide pressure measurement capabilities previously unavailable.

Part performance not guaranteed if used in water.







| | Pressure Range | 1.7 25 | 3.5 50 | 7 100 | 14 200 | 21 300 | 35 500 | 70 1000 | 140 BAR 2000 PSI |
|---------------|--|---|-----------|----------|-------------|-----------|--------------|------------|---------------------|
| INPUT | Operational Mode | Absolute, Sealed Gage | | | | | | | |
| | Over Pressure | 2 Times Rated Pressure | | | | | | | |
| | Burst Pressure | 3 Times Rated Pressure | | | | | | | |
| | Pressure Media | Compatible With Exhaust Gases and Fluids and Most Liquids and Gases Compatible With SiO ² And 15-5 PH Stainless Steel (Please Consult Factory) | | | | | | | |
| | Maximum Electrical Current | 25mA | | | | | | | |
| | Rated Electrical Excitation | 12 ± 4 VDC | | | 28 ± 4 VDC | | 28 ± 4 VDC | | |
| OUTPUT | Full Scale Reading | 5 V ± | 150mV | | 5 V ± 150mV | | 10 V ± 300mV | | |
| | Output Impedance | 200 Ohms (Nom.) | | | | | | | |
| | Frequency Response | Flat to 5000 Hz (±2dB) Typical | | | | | | | |
| | Residual Unbalance | 0.5V ±100mV | | | | | | | |
| | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.) | | | | | | | |
| | Resolution | Infinitesimal | | | | | | | |
| | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | | | |
| ENVIRONMENTAL | Operating Temperature Range | 75°F to +2000°F (24°C to +1093°C) (Front End) -4°F to +185°F (-20°C to +85°C) (Connector and Amplifier) | | | | | | | |
| | Water Flow Rate | .15 Gal/Min (Typ.) | | | | | | | |
| | Linear Vibration | 10-2,000 Hz Sine, 100g. (Max.) | | | | | | | |
| | Mechanical Shock | 20g half Sine Wave 11 msec. Duration | | | | | | | |
| PHYSICAL | Electrical Connection | Burklin 70F 8251 Connector (Mating Connector Supplied) | | | | | | | |
| | Weight | 50 Grams (Approx.) Excluding Cable and Connector | | | | | | | |
| | 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 and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (K) 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.