

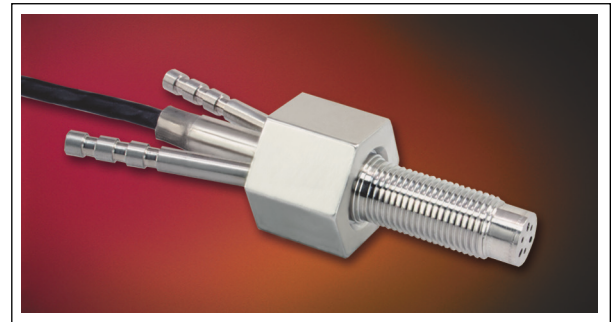


WATER/AIR COOLED IS® TRANSDUCER

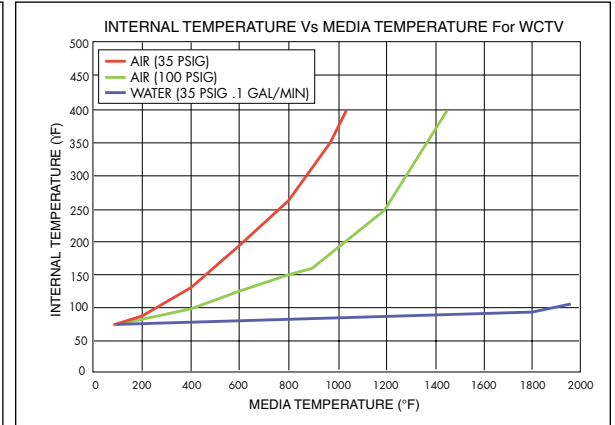
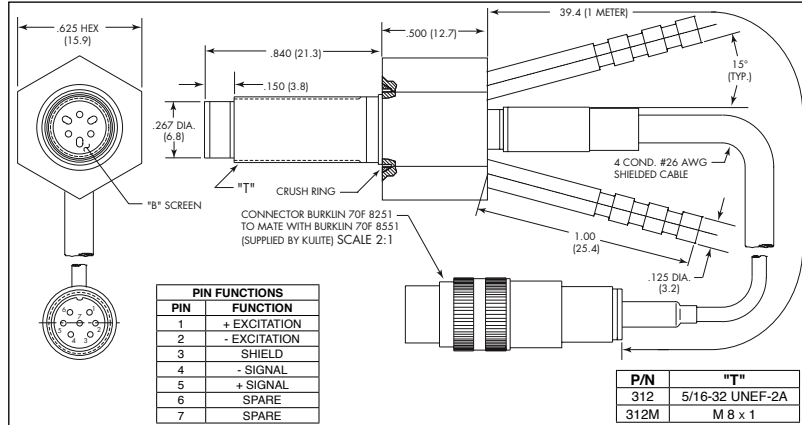
WCTV-312 (M)

- Patented Leadless Technology **VIS®**
- Superior Thermal Protection
- Both Dynamic and Static Pressure Capabilities
- Extreme Temperature Capabilities Such As Required In Exhaust Systems

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



Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the WCTV-312 transducer.



| | | | | | | |
|----------------------|--|---|----------|-----------|-----------|--------------------|
| INPUT | Pressure Range | 1.7 25 | 7 100 | 17 250 | 35 500 | 70 BAR 1000 PSI |
| | 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 Any Media Compatible With SiO ₂ and 15-5 PH Stainless Steel | | | | |
| | Rated Electrical Excitation | 10 VDC/AC | | | | |
| | Maximum Electrical Excitation | 12 VDC/AC | | | | |
| | Input Impedance | 1000 Ohms (Min.) | | | | |
| OUTPUT | Output Impedance | 1000 Ohms (Nom.) | | | | |
| | Full Scale Output (FSO) | 100 mV (Nom.) | | | | |
| | Residual Unbalance | ± 25 mV (Max.) | | | | |
| | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.) | | | | |
| | Resolution | Infinitesimal | | | | |
| | Natural Frequency (KHz) (Typ.) | 240 | 380 | 550 | 700 | 1000 |
| ENVIRONMENTAL | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | |
| | Water Flow Rate | .15 Gal/Min (Typ.) | | | | |
| | Operating Temperature Range | 75°F to 2000°F (24°C to 1093°C) | | | | |
| | Steady Acceleration | 10,000g. (Max.) | | | | |
| PHYSICAL | Linear Vibration | 10-2,000 Hz Sine, 100g. (Max.) | | | | |
| | Electrical Connection | Burklin 70F 8251 Connector (Mating Connector Supplied) | | | | |
| | Weight | 50 Grams (Approx.) 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 and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (W) 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.