



## WATER/AIR COOLED IS® TRANSDUCER

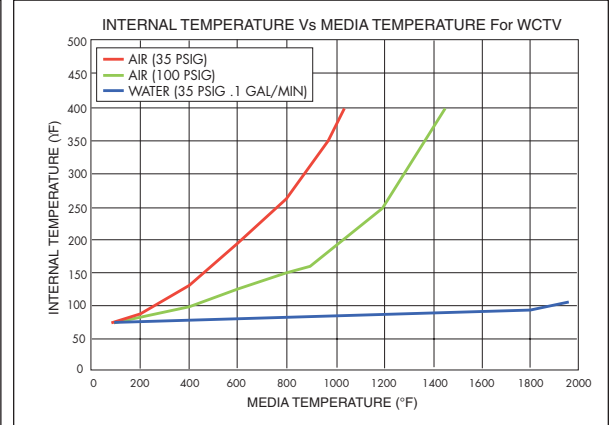
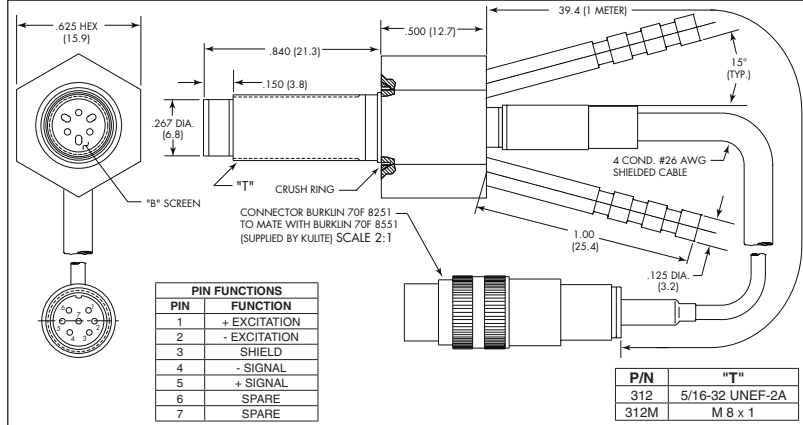
### WCTV-312 (M)

- 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-2** signal conditioner 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 <sub>2</sub> 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. (V) 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.