## WATER/AIR COOLED 5VDC OUTPUT TRANSDUCER

## **EWCTV-312 (M)**

625 HEX (15.9)

00 0

- High Bandwidth With Integrated Amplifier
- Patented Leadless Technology VIS® •
- Superior Thermal Protection •

267 DIA (6.8)

"B" SCREEN

PIN

- Both Dynamic and Static Output Capabilities
- Extreme Temperature Capabilities Such As Required

.840 (21.3)

CRUSH RING

CONNECTOR BURKLIN 70F TO MATE WITH BURKLIN 70

(SUPPLIED BY KULITE) SCALE 2:1

-.150 (3.8)

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FUNCTION + OUTPUT CABLE SHIEL

+ INPL COMM

+ INPU

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.

8551

INTERNALLY TIED

INTERNALLY TIED

-.500 (12.7)

39.4 (1 METER)

1.00 (25.4)

125 DIA (3.2)

P/N

312

312M





	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 <sup>2</sup> 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		
	Full Scale Reading	5 V ±	150mV		5 V ± 150mV		10 V ± 300mV		
	Output Impedance	200 Ohms (Nom.)							
OUTPUT	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)							
NME	Water Flow Rate	.15 Gal/Min (Typ.)							
BO	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)							
EN	Mechanical Shock	20g half Sine Wave 11 msec. Duration							
Γ.	Electrical Connection	Burklin 70F 8251 Connector (Mating Connector Supplied)							
PHYSICAL	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. (J) 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.