

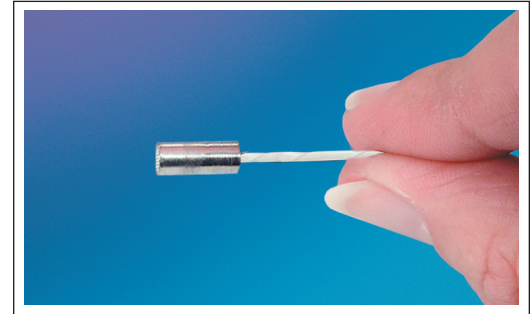


# SHORT LENGTH PRESSURE TRANSDUCER

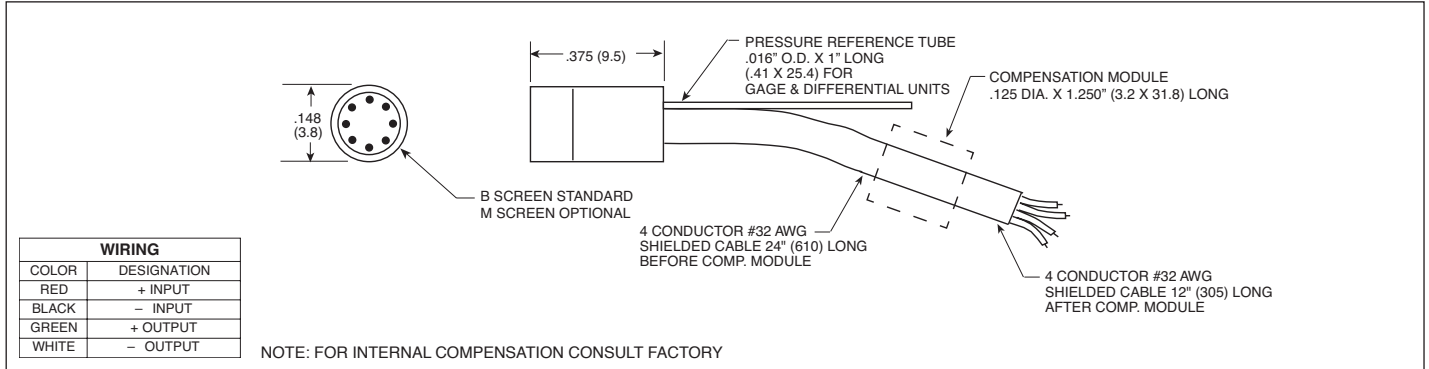
## XCL-152 SERIES

- Designed For Harsh Environments
- Ideal For Turbine Engine Probes and Wind Tunnel Applications
- Patented Leadless Technology **VIS**<sup>®</sup>
- Designed For Both Static and Dynamic Response
- Suitable For Use in Most Conductive Liquids and Gases

The XCL-152 design features Kulite's patented leadless technology. This allows for a very rugged package suited for probes, pressure rakes and other similar test set ups. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments.



Kulite recommends the **KSC Series** of signal conditioner to maximize the measurement capability of the XCL-152 transducer.



INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 BAR 1000 PSI	
	Operational Mode	Absolute, Gage, Differential			Absolute, Gage, Sealed Gage, Differential			Absolute, Sealed Gage		
	Over Pressure	2 Times Rated Pressure								
	Burst Pressure	3 Times Rated Pressure								
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory								
	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	± 5 mV (Typ.)								
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)								
	Resolution	Infinitesimal								
	Natural Frequency of Sensor Without Screen (KHz) (Typ.)	175	200	240	300	380	550	700	1000	
	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>	
	Insulation Resistance	100 Megohm Min. @ 50 VDC								
ENVIRONMENTAL	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)								
	Compensated Temperature Range	80°F to +180°F (25°C to +80°C) Any 100°F Range Within The Operating Range on Request								
	Thermal Zero Shift	± 1% FS/100°F (Typ.)								
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)								
	Steady Acceleration	10,000g. (Max.)								
PHYSICAL	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)								
	Electrical Connection	4 Conductor 32 AWG Shielded Cable 36" Long								
	Weight	.3 Gram (Nom.) Excluding Module and Leads								
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology									

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (l) 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.