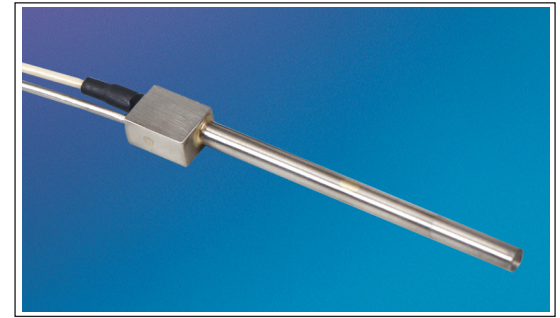




COMBINATION PITOT PRESSURE PROBE MINIATURE PRESSURE TRANSDUCER

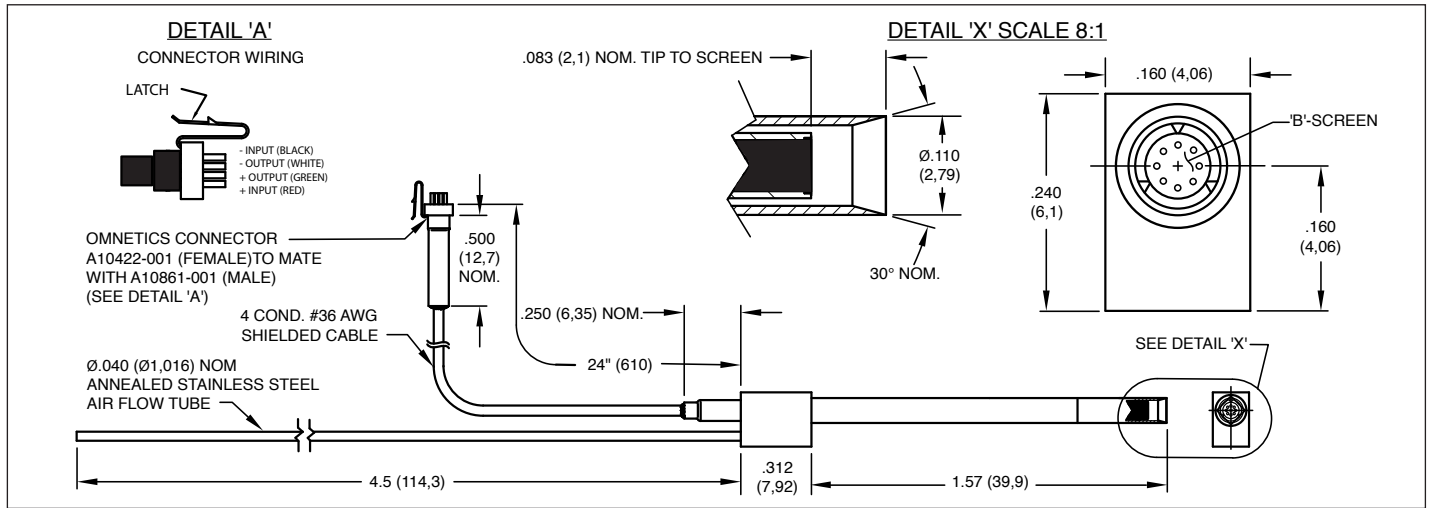
XCP-110B SERIES

- Ideal For Turbine Engine Probes and Wind Tunnel Applications
- 50 Year History Of Successful Applications In Wind Tunnel And Flight Test Programs
- Patented Silicon on Silicon Integrated Sensor **VIS**[®]
- Size And Shape Ideal For Incorporation In User Designed Probes
- Excellent Static And Dynamic Performance



The XCP-110B Series 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 conditioners to maximize the measurement capability of the XCP-110B transducer.



INPUT	Pressure Range	1 15	1.7 25	3.5 50
	Operational Mode	Absolute, Sealed Gage		
	Over Pressure	2 Times Rated Pressure		
	Burst Pressure	3 Times Rated Pressure		
	Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases		
	Rated Electrical Excitation	10 VDC/AC		
	Maximum Electrical Excitation	12 VDC/AC		
	Input Impedance	1000 Ohms (Min.)		
	Output Impedance	1000 Ohms (Nom.)		
	Full Scale Output (FSO)	100 mV (Nom.)		
OUTPUT	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.)	200	240	300
	Acceleration Sensitivity % FS/g Perpendicular	6.5x10 ⁻⁴	5.0x10 ⁻⁴	3.0x10 ⁻⁴
	Insulation Resistance	100 Megohm Min. @ 50 VDC		
	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)		
ENVIRONMENTAL	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	± 2% FS/100°F (Typ.) (± 3% FS/100°F Max.)	± 1% FS/100°F (Typ.) (± 2% FS/100°F Max.)	
	Thermal Sensitivity Shift	± 2% /100°F (Typ.) (± 3% /100°F Max.)	± 1% /100°F (Typ.) (± 2% /100°F Max.)	
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration		
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz		
PHYSICAL	Electrical Connection	4 Conductor 36 AWG Shielded Cable 24" (610) Long Terminated in an Omnetics Connector A10422-001 (Female) to Mate with A10861-001 (Male) (Mating Connector Available Upon Request)		
	Weight	3.0 Grams (Nom.) Excluding Cable and Connector		
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon		

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2023 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.