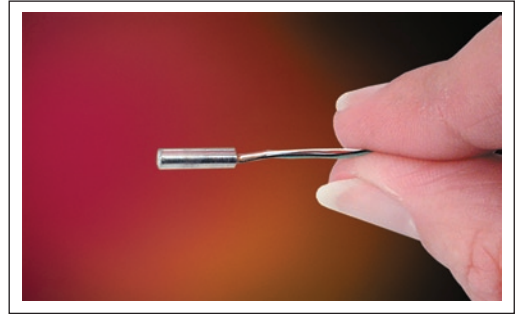




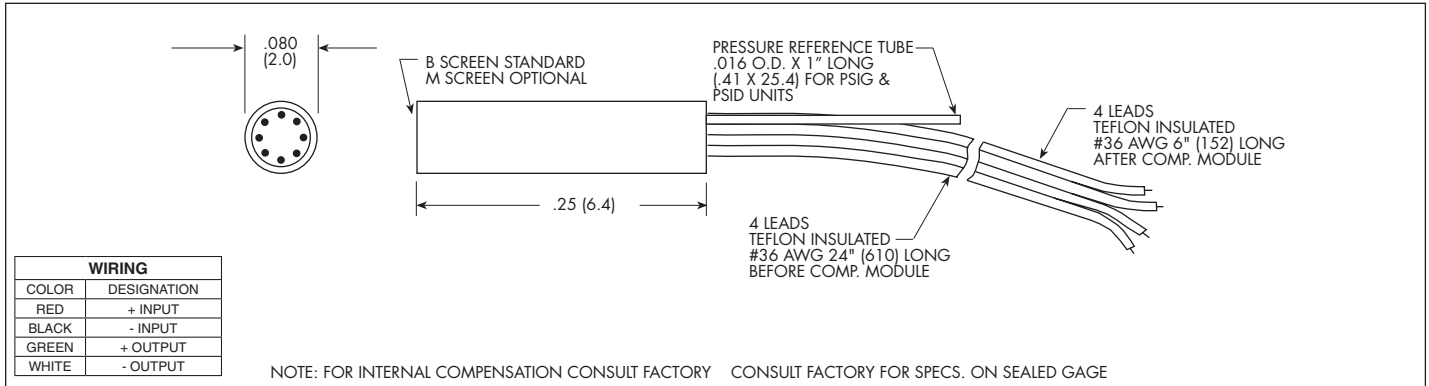
HIGH TEMPERATURE MINIATURE IS® PRESSURE TRANSDUCER

XCEL-080 SERIES

- 2mm Diameter
 - Ideal For Turbine Engine Probes
 - Designed For Both Static And Dynamic Response
 - -65°F To 525°F Temperature Capability
 - Patented Leadless Technology
 - Intrinsically Safe Leadless Technology Applications
- Available (i.e. IS-XCEL-080)



The XCEL-080 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. Its wide operating temperature range (-65°F to +525°F) makes it ideal for numerous applications in Aerospace and other areas of industry.



INPUT					
Pressure Range	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
Operational Mode	Absolute, Gage, Sealed Gage, Differential			Absolute, Sealed Gage	
Over Pressure	2 Times Rated Pressure With No Change in Calibration				
Burst Pressure	3 Times Rated Pressure				
Pressure Media	Any Media Compatible With SiO ₂ and 15-5 PH SS				
Rated Electrical Excitation	10 VDC/AC				
Maximum Electrical Excitation	15 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 (KHz) (Typ.)	400	500	650	900	1300
Acceleration Sensitivity % FS/g					
Perpendicular	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.0x10 ⁻⁴	5.0x10 ⁻⁵	3.0x10 ⁻⁵
Transverse	6.0x10 ⁻⁵	3.0x10 ⁻⁵	2.0x10 ⁻⁵	1.0x10 ⁻⁵	6.0x10 ⁻⁶
Insulation Resistance	100 Megohm Min. @ 50 VDC				
ENVIRONMENTAL					
Operating Temperature Range	-65°F to +525°F (-55°C to +273°C)				
Compensated Temperature Range	80°F to +450°F (25°C to +235°C)				
Thermal Zero Shift	± 1% FS/100°F (Typ.)				
Thermal Sensitivity Shift	± 1% /100°F (Typ.)				
Steady Acceleration	10,000g. (Max.)				
Linear Vibration	10-20,000 Hz Sine, 100g. (Max.)				
PHYSICAL					
Electrical Connection	4 Leads 36 AWG 30" 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.

Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal.