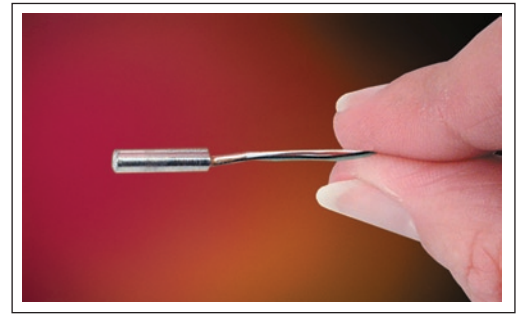




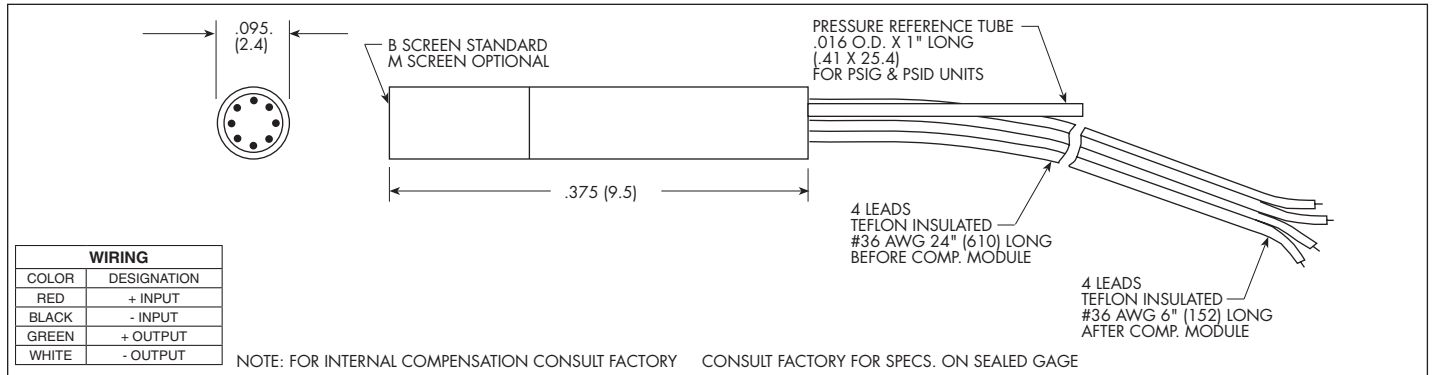
HIGH TEMPERATURE MINIATURE IS[®] PRESSURE TRANSDUCER

XCEL-093 SERIES

- Excellent Static And Dynamic Performance
- Ideal For Turbine Engine Probes
- Wide Temperature Capability -65°F To 525°F
- Patented Leadless Technology
- Intrinsically Safe Leadless Technology Applications Available (i.e. IS-XCEL-093)



The XCEL-093 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	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	70 BAR 1000 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.)	150	175	240	300	380	550	700	1000
Acceleration Sensitivity % FS/g Perpendicular	1.5x10 ⁻³	1.0x10 ⁻³	5.0x10 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.0x10 ⁻⁴	6.0x10 ⁻⁵	4.5x10 ⁻⁵
Transverse	2.2x10 ⁻⁴	1.4x10 ⁻⁴	6.0x10 ⁻⁵	4.0x10 ⁻⁵	2.0x10 ⁻⁵	9.0x10 ⁻⁶	6.0x10 ⁻⁶	3.0x10 ⁻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	10-2,000 Hz Sine, 100g. (Max.)							
PHYSICAL Electrical Connection	4 Leads 36 AWG 30" Long							
Weight	.4 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.