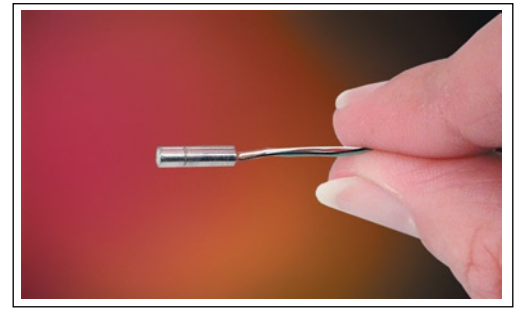


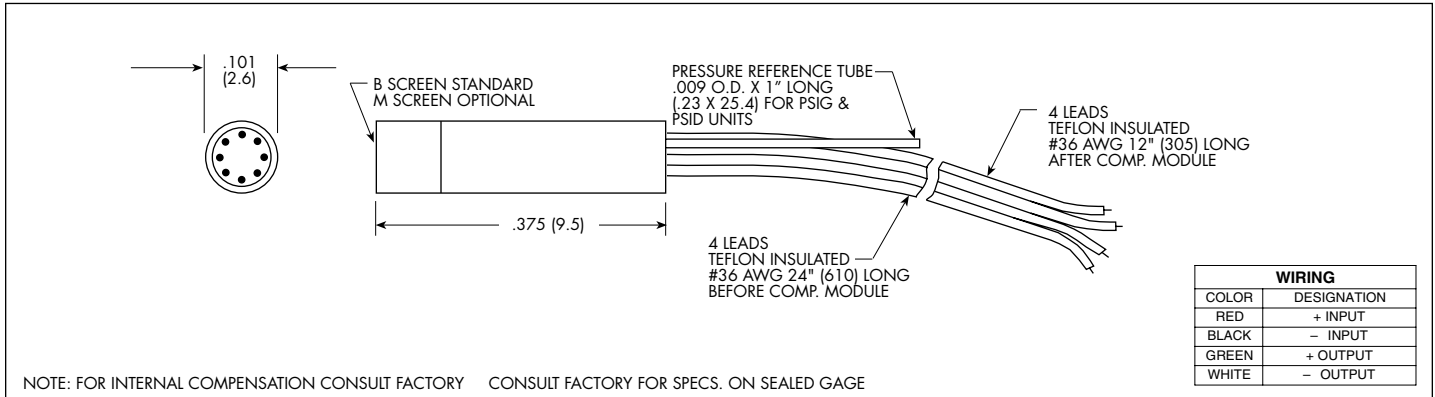


HIGH TEMPERATURE MINIATURE IS® PRESSURE TRANSDUCER XCEL-100 SERIES

- .101" Diameter
- Patented Leadless Technology
- Ideal For Turbine Engine Probes
- Designed For Both Static and Dynamic Measurement
- -65°F To 525°F Temperature Capability



The XCEL-100 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	1.0 15	1.7 25	3.5 50	7 100	14 200	21 300	35 500	70 BAR 1000 PSI
Operational Mode	Absolute, Gage, Sealed Gage, Differential					Absolute, Sealed Gage			
Over Pressure	2 Times Rated Pressure								
Burst Pressure	3 Times Rated Pressure								
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)								
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	575	700	1000
Acceleration Sensitivity % FS/g Perpendicular	1.5x10 ⁻³	1.0x10 ⁻³	5.0x10 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.1x10 ⁻⁴	9.0x10 ⁻⁵	6.0x10 ⁻⁵	4.0x10 ⁻⁵
Transverse	2.2x10 ⁻⁴	1.4x10 ⁻⁴	6.0x10 ⁻⁵	4.0x10 ⁻⁵	2.0x10 ⁻⁵	1.5x10 ⁻⁵	1.0x10 ⁻⁵	6.0x10 ⁻⁶	4.0x10 ⁻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% FS/100°F (Typ.)								
Steady Acceleration and Linear Vibration	1000g Sine								
PHYSICAL Electrical Connection	4 Leads 36 AWG 36" 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. (M)