

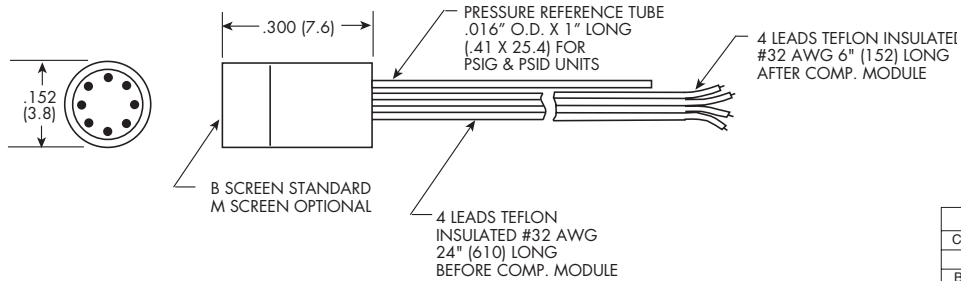
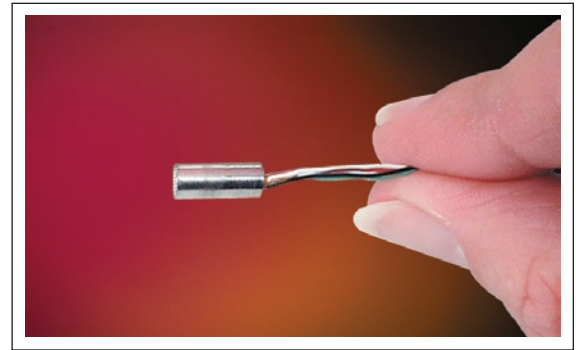


# HIGH TEMPERATURE SHORT LENGTH IS® PRESSURE TRANSDUCER

## XCEL-152 SERIES

- Ideal For Turbine Engine Probes
- Patented Leadless Technology
- Designed For Both Static and Dynamic Measurement
- High Natural Frequency
- Extra Low G Sensitivity
- Wide Temperature Capability -65°F To 525°F

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



NOTE: FOR INTERNAL COMPENSATION CONSULT FACTORY CONSULT FACTORY FOR SPECS. ON SEALED GAGE

WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	- INPUT
GREEN	+ OUTPUT
WHITE	- OUTPUT

INPUT	0.35	0.7	1.7	3.5	7	17	35	70 BAR
Pressure Range	5	10	25	50	100	250	500	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	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	700	1000
Acceleration Sensitivity % FS/g Perpendicular	1.5x10 <sup>-3</sup>	1.0x10 <sup>-3</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>	4.5x10 <sup>-5</sup>
Transverse	2.2x10 <sup>-4</sup>	1.4x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>	4.0x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	9.0x10 <sup>-6</sup>	6.0x10 <sup>-6</sup>	3.0x10 <sup>-6</sup>
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 32 AWG 30" Long							
Weight	.6 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. (C)