

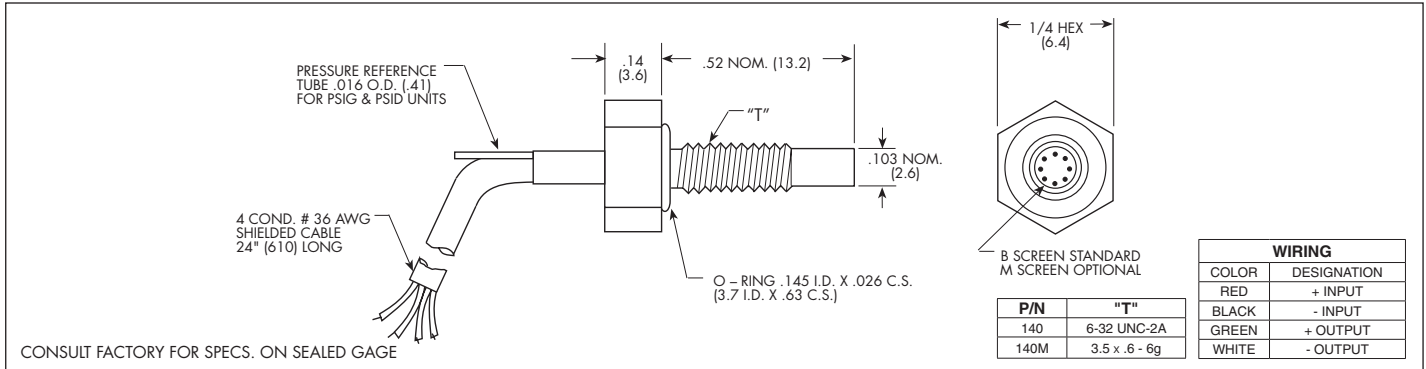


SUBMINIATURE HIGH TEMPERATURE IS[®] PRESSURE TRANSDUCER

XTE-140 (M) SERIES

- Easy Installation
- Smallest Threaded Device Available
- Silicon on Silicon Integrated Sensor **VIS[®]**
- High Natural Frequency
- 6-32 UNC-2A Thread
- High Temperature Up To 525°F

The XTE-140 Series uses a standard miniature silicon diaphragm to obtain extremely high natural frequencies in the smallest thread mount available. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments. Its wide operating range (-65°F to +525°F) makes it ideal for numerous applications in Aerospace and other areas of industry.



INPUT							
Pressure Range	.35	0.7	1.7	3.5	7	17	35 BAR
	5	10	25	50	100	250	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	All Nonconductive, Noncorrosive Liquids or Gases						
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
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
Transverse	2.2x10 ⁻⁴	1.4x10 ⁻⁴	6.0x10 ⁻⁵	4.0x10 ⁻⁵	2.0x10 ⁻⁵	9.0x10 ⁻⁶	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 +232°C)						
Thermal Zero Shift	± 1% FS/100°F (Typ.)						
Thermal Sensitivity Shift	± 1% /100°F (Typ.)						
Steady Acceleration	10,000 g. (Max.)						
Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)						
PHYSICAL							
Electrical Connection	4 Conductor 36 AWG Teflon Cable 30" Long						
Weight	3 Grams (Nom.) Excluding Cable						
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon						
Mounting Torque	15 Inch-Pounds (Max.)						

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. (F)