

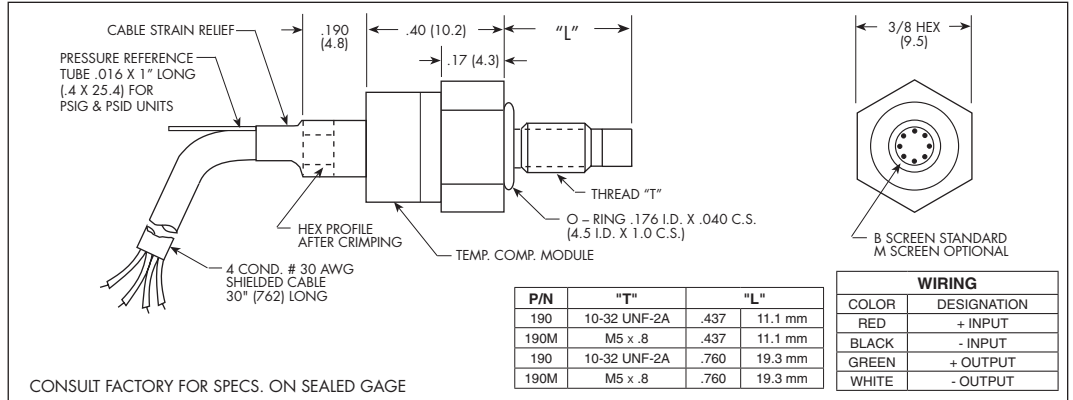
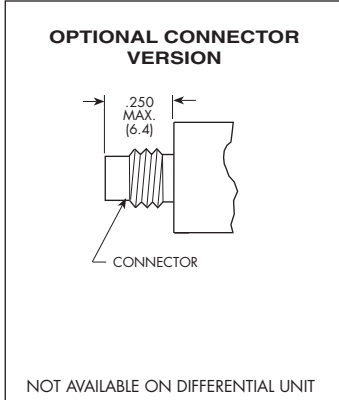
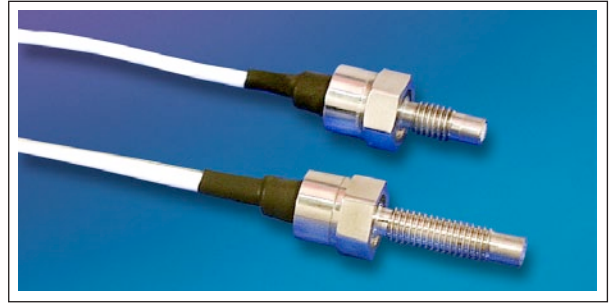


CRYOGENIC MINIATURE RUGGEDIZED IS® PRESSURE TRANSDUCER

CT-190 (M) SERIES

- Cryogenic Operation -320°F to +250°F (-195.5°C to +120°C)
- Low Ranges Available
- Silicon on Silicon Integrated Sensor **VIS®**
- Excellent Stability and Repeatability
- High Frequency Response

Similar in design to the XT-190 Series, these sensors are specifically intended for use in cryogenic wind tunnels. The extremely good low temperature stability of Kulite IS® Sensors make them ideally suited for this application.



INPUT Pressure Range	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	140 BAR 2000 PSI
Operational Mode	Absolute, Gage, Sealed Gage, Differential					Absolute, Sealed Gage			
Over Pressure	2 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)								
Burst Pressure	3 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)								
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	1000	1400
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	2.0x10 ⁻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	2.0x10 ⁻⁶
Insulation Resistance	100 Megohm Min. @ 50 VDC								
ENVIRONMENTAL Operating Temperature Range	-320°F to +250°F (-195.5°C to +120°C)								
Compensated Temperature Range	-320°F to +100°F (-195.5°C to +37.5°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 Conductor 30 AWG Shielded Cable 30" Long								
Weight	4 Grams (Nom.) Excluding Cable								
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon								
Mounting Torque	15 Inch-Pounds (Max.) 1.7Nm								