

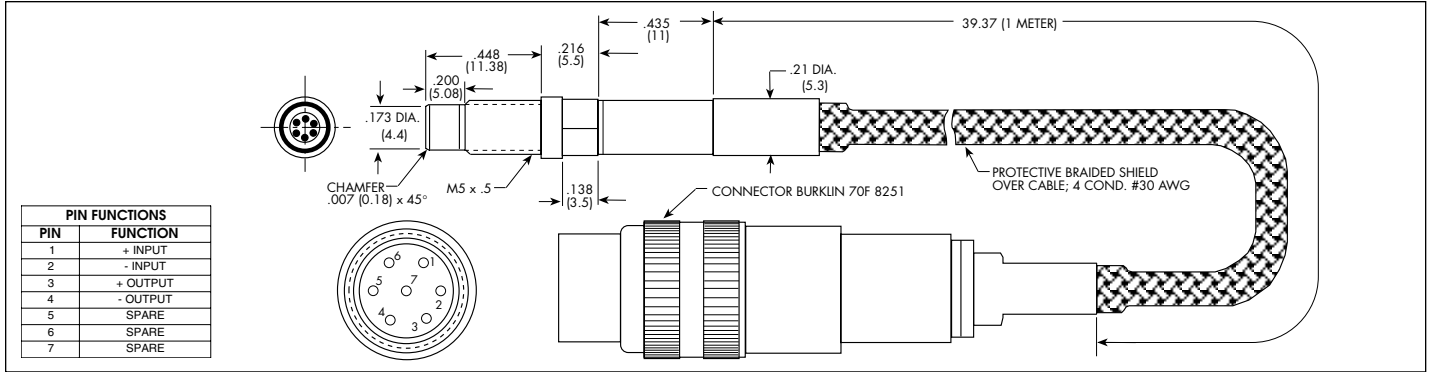


MINIATURE RUGGEDIZED AUTOMOTIVE IS® PRESSURE TRANSDUCER

XTEL-CS-190 (M) SERIES

- Robust Construction
- High Temperature
- Acceleration & Vibration Insensitive
- In Cylinder Pressure Measurement
- Patented Leadless Technology
- Dynamic and Static Capability
- Excellent Long Term Stability
Coupled with High Accuracy

The XTEL-CS-190 is a high temperature extremely rugged transducer ideal for combustion measurement in engine environments. It uses a patented acceleration insensitive leadless sensing element that is more than 100 times less sensitive to vibration than other Kulite transducers. The front of the transducer can withstand temperatures of 900°F (482°C) while the compensation module can be placed in a cooler area.



| | | |
|--|---|---------------------|
| INPUT Pressure Range | 150 2175 | 250 BAR 3625 PSI |
| Operational Mode | 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 | |
| Maximum Electrical Excitation | 15 VDC | |
| 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.) | Greater Than 1000 KHz | |
| Insulation Resistance | 100 Megohm Min. @ 50 VDC | |
| ENVIRONMENTAL Operating Temperature Range | -4°F to +900°F (-20°C to +482°C) (Front End) -4°F to +185°F (-20°C to +85°C) (Connector + Compensation Module) | |
| Compensated Temperature Range | +68°F to +840°F (+20°C to +450°C) | |
| Thermal Zero Shift | ± 1.5% FS/212° F (Typ.) | |
| Thermal Sensitivity Shift | ± 1.5% FS/212° F (Typ.) | |
| Linear Vibration | 50g Peak, Sine 10 to 2000 Hz | |
| Humidity | 100% Relative Humidity | |
| Mechanical Shock | 100g half Sine Wave 1 msec. Duration | |
| PHYSICAL Electrical Connection | Burklin 70F 8251 Connector (Mating Connector Supplied) | |
| Weight | 10 Grams (Nom.) Excluding Cable and Connector | |
| Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology | |
| Mounting Torque | 15 Inch-Pounds (Max.) 1.7 N-m | |

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. (D)