

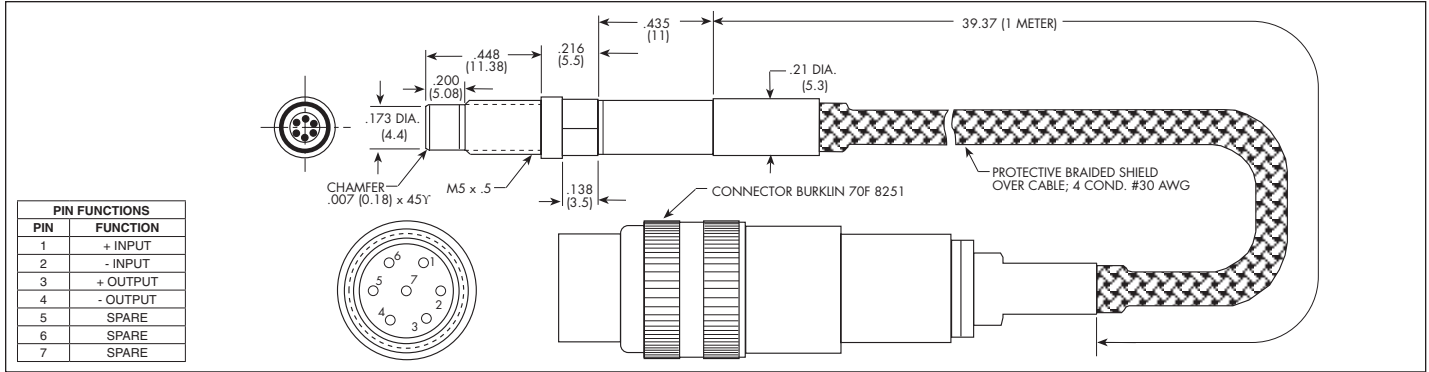


MINIATURE RUGGEDIZED AUTOMOTIVE IS® PRESSURE TRANSDUCER

XTEL-CS-190 (M) SERIES

- Robust Construction
- High Temperature
- Acceleration/Vibration Insensitive Design VIS²®
- 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% /212° F (Typ.)	
Linear Vibration	50g Peak, Sine 10 to 2000 Hz	
Humidity	100% Relative Humidity	
Mechanical Shock	100g half Sine Wave 11 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 design and development for the automotive market. <http://www.sensor-ic.com/> TEL:0755-83376549 FAX:0755-83376182 E-MAIL: szss20@163.com

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