



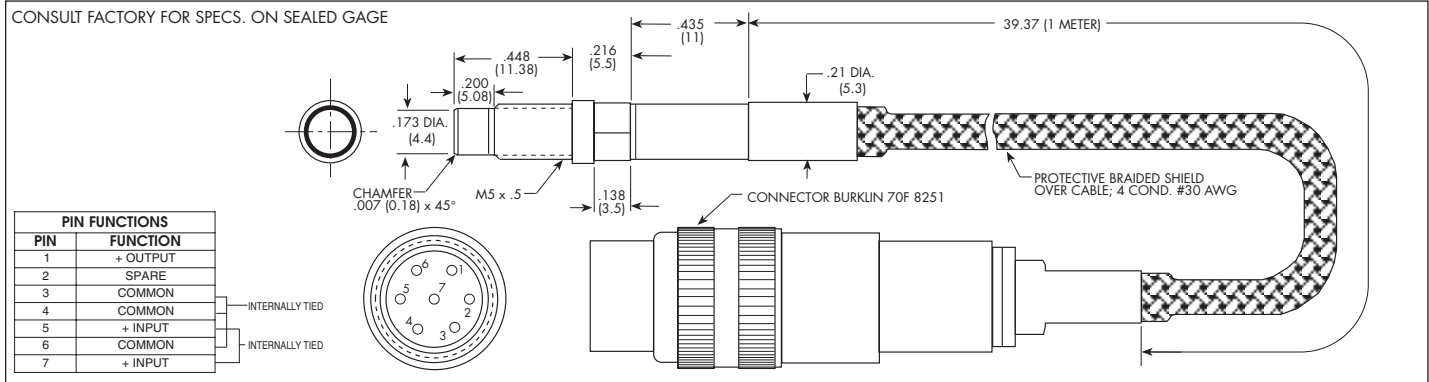
MINIATURE RUGGEDIZED AUTOMOTIVE 5VDC OUTPUT IS® PRESSURE TRANSDUCER

ETMER-CS-190 (M) SERIES

- Robust Construction
- High Temperature
- High Bandwidth Amplifier (150 KHz)
- In Cylinder Pressure Measurement
- Dynamic and Static Capability
- Excellent Long Term Stability
Coupled with High Accuracy



The ETMER-CS-190 is a high temperature extremely rugged transducer ideal for combustion measurement in engine environments. The front of the transducer can withstand temperatures of 900°F (482°C) while the in-line amplifier can be placed in a cooler area. The amplifier is a special high frequency amplifier that allows the transducer to be used up to 150KHz.



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	Any Liquid or Gas Compatible With 15-5 PH SS or Inconel 625	
Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC	
Maximum Electrical Current	25 mA	
OUTPUT Output Impedance	200 Ohms (Max.)	
Full Scale Reading	5 V ± 150mV	
Bandwidth (-3dB)	DC to 150 KHz	
Residual Unbalance	500mV ± 50mV	
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)	
Resolution	Infinitesimal	
Insulation Resistance	100 Megohm Min. @ 100 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	
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.