



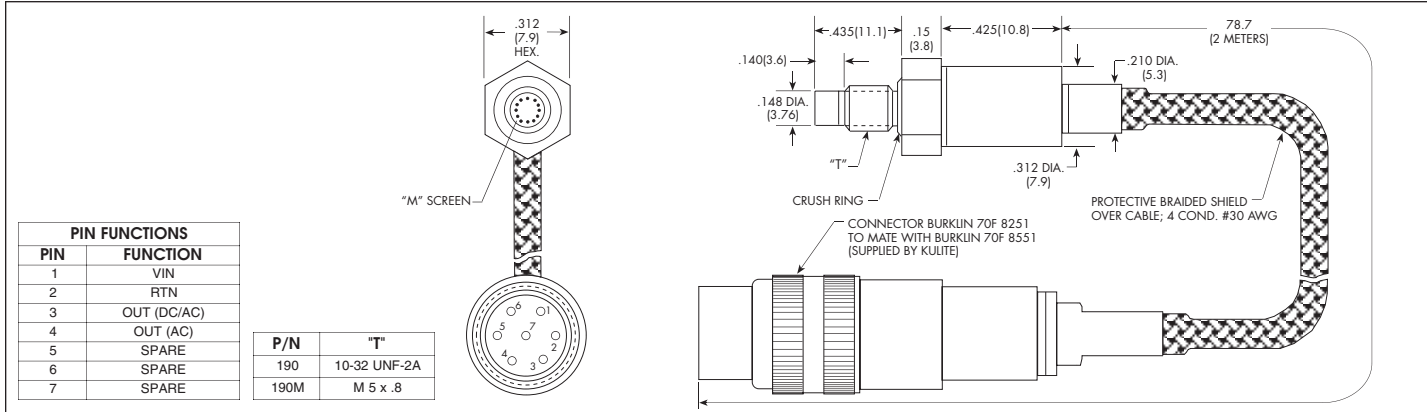
HIGH TEMPERATURE MINIATURE RUGGEDIZED GAS TURBINE IS® PRESSURE TRANSDUCER WITH SEPARATE STATIC AND DYNAMIC OUTPUTS

ETL-GTS-190 (M) SERIES

- Miniature, Robust Construction
- High Temperature
- Acceleration & Vibration Insensitive
- High Bandwidth Amplifier (150 KHz)
- Patented Leadless Technology
- Separate DC and AC Outputs
- Dynamic and Static Capability
- Excellent Long Term Stability
- Coupled with High Accuracy



The ETL-GTS-190 is a high temperature extremely rugged transducer ideal for instability measurement in gas turbine engine environments. It uses a patented acceleration insensitive leadless sensing element that is more than 1000 times less sensitive to vibration than other Kulite transducers. The front of the transducer can withstand temperatures of 1025°F (550°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	3.5 7 14 21 35 70 140 210 BAR
Pressure Range	50 100 200 300 500 1000 2000 3000 PSI
Operational Mode	Absolute, Sealed Gage
Over Pressure	2 Times Rated Pressure
Burst Pressure	3 Times Rated Pressure
Pressure Media	Any Media Compatible With 15-5 PH Stainless Steel and SiO ₂
Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC
Maximum Electrical Excitation	32 mA
OUTPUT	
Output Impedance	200 Ohms (Typ.)
Full Scale Output (FSO)	5V ± 3%
Bandwidth (-3dB)	DC: DC to 150 KHz AC: 50 Hz to 150KHz
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.)
Residual Unbalance	500mV ± 1%
Resolution	Infinitesimal
Natural Frequency (KHz) (Typ.)	Greater than 1000 KHz
Insulation Resistance	100 Megohm Min. at 50 VDC
Response Time	<1 millisc
ENVIRONMENTAL	
Operating Temperature Range	-65° F to +1025° F (-55° C to +550° C) (Front End) -65° F to +257° F (-55° C to +125° C) (Connector +Amplifier)
Compensated Temperature Range	+80° F to +840° F (+25° C to +450° C)
Thermal Zero Shift	± 2% FS/100° C (Typ.)
Thermal Sensitivity Shift	± 2% FS/100° C (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
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 for pressure ranges from 3.5 to 210 BAR. www.sensor-ic.com/ TEL:0755-83376549 FAX:0755-83376182 E-MAIL: szss20@163.com
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