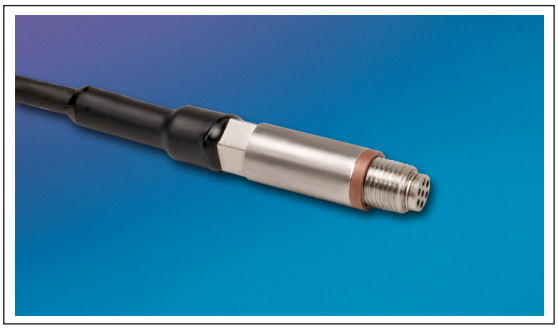
# MINIATURE AUTOMOTIVE 5VDC OUTPUT PRESSURE TRANSDUCER
# INLET PRESSURE TRANSDUCER

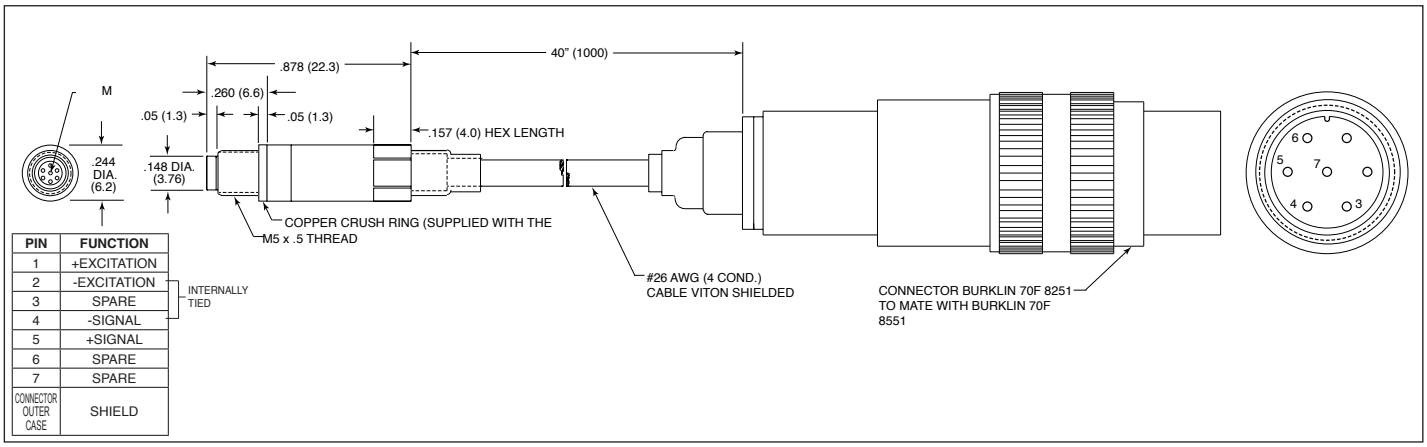
## ETL-184(X)-190M SERIES

- High Bandwidth With Integrated Amplifier
- Excellent Long Term Stability Coupled With High Accuracy
- Patented Leadless Technology **VIS**®
- Robust Construction
- RoHS Compliant



The ETL-184 Series results in a highly stable, reliable, and rugged instrument with all the advantages of microcircuitry: significant miniaturization, excellent repeatability, low power consumption, etc. The miniaturization process also yields a marked increase in the natural frequencies of the transducers. It is small, versatile, and requires no additional signal conditioning.

Part performance not guaranteed if used in water.




| PIN | FUNCTION | |
|---|---|---|
| 1 | +EXCITATION | |
| 2 | -EXCITATION | INTERNALLY TIED |
| 3 | SPARE | |
| 4 | -SIGNAL | |
| 5 | +SIGNAL | |
| 6 | SPARE | |
| 7 | SPARE | |
| CONNECTOR OUTER CASE | SHIELD | |

| | | ETL-184A-190M | ETL-184B-190M | ETL-184C-190M |
|---|---|---|---|---|
| INPUT | Pressure Range | 2 BAR (Other Ranges Available Upon Request) | | |
| | Operational Mode | Absolute | | |
| | Over Pressure | 2 Times Rated Pressure | | |
| | Burst Pressure | 3 Times Rated Pressure | | |
| | Pressure Media | Air, Water, Oil, Fuel | | |
| | Rated Electrical Excitation | 12 ± 4 VDC | 24 ± 4 VDC | 24 ± 4 VDC |
| | Maximum Current | 10 mA | | |
| OUTPUT | Output Impedance | < 100 Ohms | | |
| | Full Scale Output (FSO) | 4.5 VDC ± 75 mV | 5 VDC ± 75 mV | 9.5 VDC ± 150 mV |
| | Residual Unbalance | ± 500 mV ± 75 mV | | |
| | Combined Non-Linearity and Hysteresis Error | < 0.2% FS | | |
| | Resolution | Infinitesimal | | |
| | Frequency Response | > 50 kHz | | |
| | Insulation Resistance | > 100 Meg Ohm @ 50 V | | |
| ENVIRONMENTAL | Operating Temperature Range | +68°F to 350°F (+20°C to +175°C) +257°F (+125°C) Max. For The Amplifier | | |
| | Diagnosis Temperature Range | +68°F to 320°F (+20°C to +160°C) | | |
| | Compensated Temperature Range | +68°F to 167°F (+20°C to +75°C) | | |
| | Total Error Band (Including Non-Linearity, Hysteresis, Thermal Effects, Long Term Stability, Mounting Influence) | ± 1% FS For Compensated Temperature Range Ref. To +100°F<br>± 3% For Diagnosis Temperature Range Ref. To +100°F | | |
| PHYSICAL | Electrical Connection | Burklin 70F 8251 Connector (Mating Connector Supplied) | | |
| | Weight | < 15 Grams (Without Cable and Amplifier Module) | | |
| | Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology | | |
| | Torque Sensitivity | < 0.2% FS | | |
| | Mounting Torque | 4 Nm (Max.) | | |

*Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (D) Continuous development and refinement of our products may result in specification changes without notice.* *Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.*
*Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.*

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