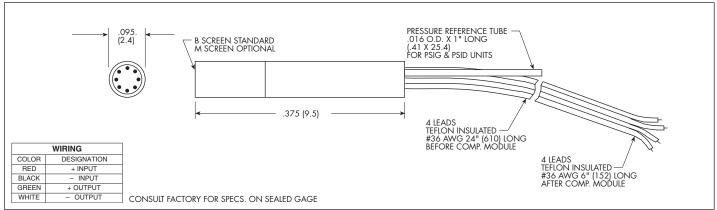
HIGH TEMPERATURE MINIATURE IS® PRESSURE TRANSDUCER

XCE-093 SERIES

- Excellent Static And Dynamic Performance
- Ideal For Turbine Engine Probes
- Wide Temperature Capability -65°F To 525°F

The XCE-093 Series allow for a very rugged package suited for probes, pressure rakes and other similar test set ups. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments. Its wide operating temperature range (-65°F to +525°F) makes it ideal for numerous applications in Aerospace and other areas of industry.





| INPUT Pressure Range | 0.35 5 | 0.7 10 | 1.7 25 | 3.5 50 | 7 100 | 17 250 | 35 500 | 70 BAR 1000 PSI | |
|--|--|--|--|--|--|--|--|--|--|
| Operational Mode | Absolute, Gage, Sealed Gage, Differential Absolute, Sealed Gage | | | | | | | | |
| Over Pressure | 2 Times Rated Pressure With No Change In Calibration | | | | | | | | |
| Burst Pressure | 3 Times Rated Pressure | | | | | | | | |
| Pressure Media | All Nonconductive, Noncorrosive Liquids or Gases | | | | | | | | |
| Rated Electrical Excitation | 10 VDC/AC | | | | | | | | |
| Maximum Electrical Excitation | 15 VDC/AC | | | | | | | | |
| 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.) | 150 | 175 | 240 | 300 | 380 | 550 | 700 | 1000 | |
| Acceleration Sensitivity % FS/g Perpendicular Transverse | 1.5x10 ⁻³ 2.2x10 ⁻⁴ | 1.0x10 ⁻³ 1.4x10 ⁻⁴ | 5.0x10 ⁻⁴ 6.0x10 ⁻⁵ | 3.0x10 ⁻⁴ 4.0x10 ⁻⁵ | 1.5x10 ⁻⁴ 2.0x10 ⁻⁵ | 1.0x10 ⁻⁴ 9.0x10 ⁻⁶ | 6.0x10 ⁻⁵ 6.0x10 ⁻⁶ | 4.5x10 ⁻⁵ 3.0x10 ⁻⁶ | |
| Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | | | | |
| ENVIRONMENTAL Operating Temperature Range | -65°F to +525°F (-55°C to +273°C) | | | | | | | | |
| Compensated Temperature Range | 80°F to +450°F (25°C to +235°C) | | | | | | | | |
| Thermal Zero Shift | ± 1% FS/100°F (Typ.) | | | | | | | | |
| Thermal Sensitivity Shift | ± 1% /100°F (Typ.) | | | | | | | | |
| Steady Acceleration | 10,000g. (Max.) | | | | | | | | |
| Linear Vibration | 10-2,000 Hz Sine, 100g. (Max.) | | | | | | | | |
| PHYSICAL Electrical Connection | 4 Leads 36 AWG 30" Long | | | | | | | | |
| Weight | | .4 Gram (Nom.) Excluding Module and Leads | | | | | | | |
| Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon | | | | | | | | |

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. (H)