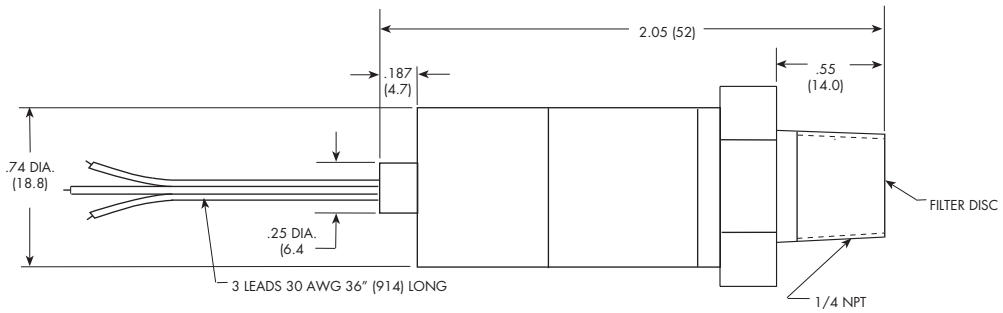
# 5 VDC OUTPUT PRESSURE TRANSDUCER

## ETQ-500 SERIES

- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- All Welded Construction
- Excellent Stability and Reliability
- Secondary Containment On Absolute And Sealed Gage Units
- Silicon on Silicon Integrated Sensor **VIS**®




| WIRING | |
|---|---|
| COLOR | DESIGNATION |
| RED | + INPUT |
| BLACK | - INPUT |
| GREEN | + OUTPUT |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| INPUT | Pressure Range | 3.5<br>50 | 7<br>100 | 17<br>250 | 35<br>500 | 70<br>1000 | 170<br>2500 | 350 BAR<br>5000 PSI |
| | Operational Mode | Absolute, Sealed Gage | | | | | | |
| | Over Pressure | 2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 30000 PSI (2100 BAR) | | | | | | |
| | Burst Pressure | 3 Times Rated Pressure | | | | | | |
| | Pressure Media | All Nonconductive, Noncorrosive Liquids or Gases | | | | | | |
| | Maximum Electrical Current | 25 mA | | | | | | |
| | Rated Electrical Excitation | 8 - 16 VDC | | | 13 - 32 VDC | | | |
| OUTPUT | Full Scale Reading | 5 VDC ± 150 mV | | | 5 VDC ± 150 mV or 10 VDC ± 300 mV | | | |
| | Output Impedance | 200 Ohms (Nom.) | | | | | | |
| | Bandwidth (-3dB) | DC to 3000 Hz | | | | | | |
| | Residual Unbalance | 0.5V ± 75mV | | | | | | |
| | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.) | | | | | | |
| | Resolution | Infinitesimal | | | | | | |
| | Natural Frequency of Sensor Without Screen (KHz) (Typ.) | Greater Than 400 KHz | | | | | | |
| | Acceleration Sensitivity % FS/g Perpendicular | $1.0x10^{-3}$ | $5.2x10^{-4}$ | $2.2x10^{-4}$ | $1.1x10^{-4}$ | $6.2x10^{-5}$ | $2.6x10^{-5}$ | $1.5x10^{-5}$ |
| | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | | |
| ENVIRONMENTAL | Operating Temperature Range | -65°F to +250°F (-55°C to +120°C) | | | | | | |
| | Compensated Temperature Range | 0°F to +212°F (-18°C to +100°C) Other Ranges Quoted on Request | | | | | | |
| | Thermal Zero Shift | ± 3% FS/100°F (Typ.) | | | | | | |
| | Thermal Sensitivity Shift | ± 3% /100°F (Typ.) | | | | | | |
| | Linear Vibration | 10-2,000 Hz Sine, 100g (Max.) | | | | | | |
| | Mechanical Shock | 20g half Sine Wave 11 msec. Duration | | | | | | |
| PHYSICAL | Electrical Connection | 3 30 AWG Leads 30" (762) Long | | | | | | |
| | Weight | 24.5 Grams (Max.) Excluding Cable | | | | | | |
| | Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon | | | | | | |
| | Mounting Torque | 80 Inch-Pounds (Max.) | | | | | | |