

Model 2204

Bonded Strain Gage Pressure Transducer

Specifications:

| <i>Measurand Fluids</i> | All fluids compatible with 316 and 347 stainless steel. Pressure media cavity is entirely fusion welded. | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|-------------|-----------------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|--------|-----|--------|------|--------|------|
| <i>Full Scale Output</i> | 3.00 ±0.015 mV open circuit per volt excitation. Calibrated at 10.00 Vdc excitation. | | | | | | | | | | | | | | | | | | |
| <i>Zero Balance</i> | 0.00 ±0.03 mV per volt at +70°F (+21°C). | | | | | | | | | | | | | | | | | | |
| <i>End Point Linearity</i> | Within ±0.25% FSO | | | | | | | | | | | | | | | | | | |
| <i>Hysteresis</i> | Within 0.25% FSO. | | | | | | | | | | | | | | | | | | |
| <i>Repeatability</i> | Within 0.10% FSO. | | | | | | | | | | | | | | | | | | |
| <i>Resolution</i> | Infinite. | | | | | | | | | | | | | | | | | | |
| <i>Natural Frequency</i> | <table><thead><tr><th>Range (PSI)</th><th>Frequency (kHz)</th></tr></thead><tbody><tr><td>0-200</td><td>4.2</td></tr><tr><td>0-250</td><td>4.5</td></tr><tr><td>0-300</td><td>4.8</td></tr><tr><td>0-500</td><td>6.3</td></tr><tr><td>0-750</td><td>7.2</td></tr><tr><td>0-1000</td><td>7.5</td></tr><tr><td>0-1500</td><td>10.5</td></tr><tr><td>0-2000</td><td>11.3</td></tr></tbody></table> | Range (PSI) | Frequency (kHz) | 0-200 | 4.2 | 0-250 | 4.5 | 0-300 | 4.8 | 0-500 | 6.3 | 0-750 | 7.2 | 0-1000 | 7.5 | 0-1500 | 10.5 | 0-2000 | 11.3 |
| Range (PSI) | Frequency (kHz) | | | | | | | | | | | | | | | | | | |
| 0-200 | 4.2 | | | | | | | | | | | | | | | | | | |
| 0-250 | 4.5 | | | | | | | | | | | | | | | | | | |
| 0-300 | 4.8 | | | | | | | | | | | | | | | | | | |
| 0-500 | 6.3 | | | | | | | | | | | | | | | | | | |
| 0-750 | 7.2 | | | | | | | | | | | | | | | | | | |
| 0-1000 | 7.5 | | | | | | | | | | | | | | | | | | |
| 0-1500 | 10.5 | | | | | | | | | | | | | | | | | | |
| 0-2000 | 11.3 | | | | | | | | | | | | | | | | | | |
| <i>Proof Pressure Rating</i> | 0-200 thru 0-750 PSI ranges: 3 times FS range. 0-1000 thru 0-2000 PSI ranges: 4000 PSI. Application of proof pressure will not cause any change in performance characteristics. | | | | | | | | | | | | | | | | | | |
| <i>Burst Pressure Rating</i> | 0-200 thru 0-500 PSI ranges: greater than 2500 PSI. 0-750 PSI range: greater than 3750 PSI. 0-1000 thru 0-2000 PSI ranges: greater than 8000 PSI. | | | | | | | | | | | | | | | | | | |
| <i>Compensated Temperature Range</i> | -30°F to +170°F (-34°C to +77°C). Options available. | | | | | | | | | | | | | | | | | | |
| <i>Operating Temperature Range</i> | -100°F to +300°F (-73°C to +149°C). Options available. | | | | | | | | | | | | | | | | | | |
| <i>Thermal Sensitivity Shift</i> | Less than ±0.005% FSO per °F over compensated temperature range (±0.009% FSO per °C). | | | | | | | | | | | | | | | | | | |
| <i>Thermal Zero Shift</i> | Less than ±0.010% FSO per °F over compensated temperature range (±0.018% FSO per °C). | | | | | | | | | | | | | | | | | | |
| <i>Triaxial Mechanical Shock</i> | 100 G's applied for 11 milliseconds will not cause change in performance characteristics. | | | | | | | | | | | | | | | | | | |
| <i>Acceleration Error</i> | Less than ±0.005% FSO/G along most sensitive axis. | | | | | | | | | | | | | | | | | | |
| <i>Excitation</i> | 10 volts dc or ac rms recommended. 15 volts dc or ac maximum. | | | | | | | | | | | | | | | | | | |
| <i>Input Resistance</i> | 350 ±3.5 ohms at +70°F (+21°C). Input circuitry symmetrical. | | | | | | | | | | | | | | | | | | |
| <i>Output Resistance</i> | 350 ±5.0 ohms at +70°F (+21°C). | | | | | | | | | | | | | | | | | | |
| <i>Insulation Resistance</i> | Greater than 10k megohms at 50 Vdc between all terminals in parallel and case at +70°F (+21°C). | | | | | | | | | | | | | | | | | | |

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| <i>Pressure Connection</i> | 7/16-20 external thread per MS33656-4 is standard. Options available. |
| <i>Pressure Cavity Volume</i> | 0.04 in ³ (0.66 ml) including MS33656-4 fitting. |
| <i>Electrical Receptacle</i> | Stainless steel hermetic receptacle to mate with MS3116-10-6S. Standard wiring: Excitation +A, -D; Signal +B, -C; No Connection E, F. Options available. |
| <i>Enclosure</i> | Entirely welded and hermetically sealed stainless steel. |
| <i>Weight</i> | Approximately 7.25 ounces (203 g). |

