Model 2215

Bonded Strain Gage Pressure Transducer

Specifications:

Measurand Fluids All fluids compatible with 316 and 347 stainless steel. Pressure media

cavity is entirely fusion welded

Full Scale Output 3.00 ±0.015 mV open circuit per volt excitation. Calibrated at 10.00

Vdc excitation.

Zero Balance $0.00 \pm 0.03 \text{ mV}$ per volt at +70°F (+21°C).

End Point LinearityWithin ±0.25% FS0HysteresisWithin 0.25% FS0.RepeatabilityWithin 0.10% FS0.

Resolution Infinite

Pressure Rating

Temperature Range

Natural Frequency Range(PSI) Frequency (kHz)

0-15 1.0 0-20 1.2 0-25 1.3 0-30 1.4 0-50 2.0 0-75 2.5 0-100 3.0

Proof Application of 500 PSI will not cause any change in

Pressure Rating performance characteristics
Burst Greater than 1500 PSI.

Compensated -30°F to +170°F (-34°C to +77°C). Options available

Operating -100° F to $+300^{\circ}$ F (-73 $^{\circ}$ C to $+149^{\circ}$ C). Options available. Temperature Range

Thermal Less than $\pm 0.005\%$ FSO per °F over compensated temperature sensitivity Shift range ($\pm 0.009\%$ FSO per °C).

Thermal Zero Shift Less than ±0.010% FSO per °F over compensated temperature range (±0.018% FSO per °C).

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Triaxial Mechanical 30 G's applied for 11 milliseconds will not cause change in Shock performance characteristics.

Acceleration Error Along most sensitive axis:

 0-15 PSI range
 ±0.16% FSO/G

 0-20 PSI range
 ±0.12% FSO/G

 0-25 PSI range
 ±0.09% FSO/G

 0-30 PSI range
 ±0.08% FSO/G

 0-50 PSI range
 ±0.04% FSO/G

 0-75 PSI range
 ±0.03% FSO/G

 0-100 PSI range
 ±0.02% FSO/G

Excitation 10 volts dc or ac rms recommended. 15 volts dc or ac maximum. Input Resistance 350 \pm 3.5 ohms at $+70^{\circ}$ F ($+21^{\circ}$ C). Input circuitry symmetrical.

Output Resistance 350 ±5.0 ohms at +70°F (+21°C).

Insulation Greater than 10k megohms at 50 Vdc between all terminals

Resistance in parallel and case at +70°F (+21°C).

Pressure 7/16-20 external thread per MS33656-4 is standard. Options available.

Pressure 0.04 in³ (0.656 ml) including MS33656-4 fitting

Cavity Volume

Electrical Stainless steel hermetic receptacle to mate with MS3116-10-6S.

Receptacle Standard wiring: Excitation +A, -D; Signal +B, -C; No Connection E, F. Options available.

Enclosure Entirely welded and hermetically sealed stainless steel.

Weight Approximately 5.75 ounces (163 g).

