Model 2210

Bonded Strain Gage Pressure Transducer

Specifications:

Measurand Fluids 0-100 thru 0-2000 PSI ranges: all fluids compatible with 316 and

347 stainless steel. 0-3000 thru 0-20,000 PSI ranges: all fluids

compatible with 17-4 PH stainless steel.

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

Vdc excitation.

Zero Balance 0.00 ± 0.03 mV per volt at + 70° F (+21°C).

Within 0.10% FSO

End Point Linearity Within ±0.20% FSO Hysteresis Within 0.20% FSO.

Resolution Infinite.

Repeatability

Natural Frequency Range(PSI) Frequency (kHz) Range(PSI) Frequency (kHz)

0-100 3.0 0-2000 32.0 0-150 6.1 0-3000 59.0 0-200 7.0 0-4000 68.0 0-250 7.6 0-5000 76.0 0-300 8.5 0-7500 90.0 0-500 11.0 0-10,000 108.0 0-750 15.0 0-15,000 135.0 0-1000 18.0 0-20,000 283.0 0-1500 25.0

Proof

0-100 PSI range: 500 PSI

Pressure Rating 0-150 thru 0-500 PSI ranges: 1500 PSI. 0-750 thru 0-1500 PSI ranges: 3000 PSI.

0-2000 thru 0-20,000 PSI ranges: 1.5 times FS range Application of proof pressure will not cause any change in

performance characteristics.

Burst 0-100 PSI range: 1500 PSI

0-150 thru 0-2000 PSI ranges: 4500 PSI. Pressure Rating

0-3000 thru 0-20,000 PSI ranges: 3.0 times range.

Compensated

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

Temperature Range

Operating -100°F to +300°F (-73°C to +149°C).

Temperature Range

Less than ±0.005% FSO per °F over compensated temperature

Sensitivity Shift

range (±0.009% FSO per °C).

Thermal Zero Shift Less than ±0.010% FSO per °F over compensated temperature

range (±0.018% FSO per °C).

Triaxial Mechanical Shock

1000 G's applied for 1 millisecond or 100 G's applied for 11 milliseconds will not change performance characteristics.

Acceleration Error

Along most sensitive axis:

0-100 PSI range ±0.020% FSO/G 0-150 PSI range ±0.007% FSO/G 0-200 PSI range ±0.006% FSO/G 0-250 PSI range ±0.005% FSO/G 0-300 PSI range ±0.004% FSO/G 0-500 PSI range ±0.002% FSO/G

0-750 thru 0-20,000 PSI ranges error is less than ±0.0015% FSO/G

Excitation 10 volts dc or ac rms recommended. 15 volts dc or ac maximum. Input Resistance 350 ±3.5 ohms at +70°F (+21°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)

0-100 thru 0-10,000 PSI ranges....7/16-20 internal thread per Pressure

Connection MS33649-4 pressure fitting.

0-15,000 thru 0-20,000 PSI ranges....AE F250-C®, 9/16-18 UNF

thread

Options available.

Pressure

0.008 in3 (0.13 ml) excluding fitting. Cavity Volume

Electrical

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

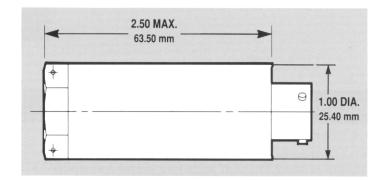
Standard wiring

Excitation +A, -D; Signal +B, -C; No Connection E, F.

Options available.

Enclosure Entirely welded and hermetically sealed stainless steel.

Weight Approximately 4.5 ounces (126 g).



Warranty:

Teledyne Taber, herein after designated as the Company, warrants that any part or parts of the product which, under normal operating conditions in the plant of the original purchaser thereof, proves defective in material or workmanship within one year from the date of shipment by the Company, as determined by an inspection by the Company, will be repaired or replaced free of charge provided that the original purchaser promptly sends to the Company the defective material, transportation charges prepaid, with notice of the defect and establishes that the product has been properly installed, maintained and operated within the limits of rated and normal usage. Replacement parts will be shipped F.O.B. the Teledyne Taber plant. The terms of this Warranty do not in any way extend to part or parts of the product thereof which has a life, under normal usage, inherently shorter than the one year indicated above. Said Warranty in respect to replacement of defective parts and any such additional warranties express or implied, including any implied warranty of merchantability, or fitness for any particular purpose.

Warranty specifications and qualitative calibration data, as supplied with each transducer, are based on tests performed on and values obtained with N.I.S.T. traceable laboratory standards and test equipment of

Teledyne Taber reserves the right to make changes without notice at any time in materials, specifications and models, and also to discontinue models.