## **Model 2415**

## **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 5.000 ±0.050 Vdc for 50k ohm load or greater.

Zero Balance 0.000 ±0.050 Vdc at +70°F (+21°C).

End Point Linearity Within ±0.25% FSO Within 0.25% FSO Hysteresis Repeatability Within 0.10% FSO.

Resolution Infinite

Natural Frequency Range(PSI) Frequency (Hz)

> 0-10 1000.0 0 - 151000.0 0-20 1200.0 0-25 1300.0 0 - 301400.0 0 - 502000.0 0 - 752500.0

0-100 3000.0 Proof Application of 500 PSI will not cause changes in

Pressure Rating performance characteristics

Burst Greater than 1500 PSI.

Pressure Rating

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

Temperature Range Options available

Operating -65°F to +250°F (-54°C to +121°C)

Temperature Range

Thermal Less than ±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).

Shock

Acceleration Error

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

Along most sensitive axis:

0-10 PSI range ... ±0.20% FSO/G 0-15 PSI range .. ±0.16% FSO/G 0-20 PSI range .. ±0.12% FSO/G . ±0.09% FSO/G 0-25 PSI range 0-30 PSI range . ±0.08% FSO/G 0-50 PSI range . ±0.04% FSO/G 0-75 PSI range ..... ... ±0.03% FSO/G .. ±0.02% FSO/G 0-100 PSI range .....

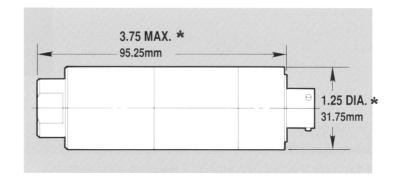
20-36 volts dc unregulated. Reverse polarity protected. Excitation

±100 volt 10 microsecond spikes will not cause permanent damage

Current Drain 35 mAdc typical Output Impedance 25 ohms typical

Output Noise Less than 15 mV peak to peak at less than 300 kHz. Insulation Greater than 1000 megohms at 50 Vdc between all terminals Resistance in parallel and case at +70°F (+21°C). DC Isolation Greater than 1000 megohms at 50 Vdc from excitation to signal output terminals at +70°F (+21°C). Pressure 7/16-20 internal thread per MS33649-4 Connection Options available. Pressure 0.04 in<sup>3</sup> (0.656 ml) excluding MS33649-4 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.

Approximately 8 ounces (224g).



## \*UPDATE:

The diameter and length of the body on the model 2415 has changed. The new diameter is now 1.55"(39.37mm) not 1.25" (31.75mm), and the Length is now 3.20" (81.28mm) not 3.75' (95.25mm) MAX as previously built and shown above. Contact Tabers Office for verification on all critical dimensions.

Weight