

"WITHOUT AN ORIGINAL THERE CAN BE NO IMITATION"

# ACAM INSTRUMENTATION LTD

FOR TRANSDUCERS AND ELECTRONICS



CERAMIC SENSORS

Acam Instrumentation can offer a wide range of pressures to suit a variety of applications as may be found in general industry, medical and military. Employing ceramic technology with a wide variety of sizes from 7mm od to 50 mm od.

These sensors can be used in a OEM context or we can engineer them into completed transducers. Sensors are available as a diaphragm for customer mounting and wiring, with one ceramic ring for ease of mounting without wiring or fully wired with flying lead or connector mounted on PCB or ceramic sheet.

Output are good at 15

mV with a 5 volt supply.

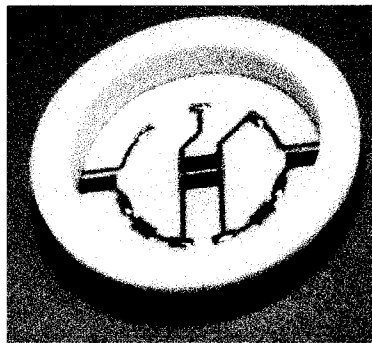
## APPLICATION NOTE

Very high price performance ratio is achieved.

Linearity's of better than 0.15% are easily achievable.

Performance under thermal cycling is very good this sensor displays a very low thermal hysteresis and excellent thermal stability. Temperature coefficients can be customised to customer requirements.

We have a commitment to quality, state of the art technology, and personal service, with over thirty years of specialists experience in sensor and transducer design.



TYPICAL CERAMIC SENSOR

**Acam Instrumentation Ltd**  
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**Acam Instrumentation Ltd**  
 Manufacture A Variety Of  
 Standard Sensors For The  
 Measurement Of Load Pressure  
 Torque and Strain.  
 Please ask for Details

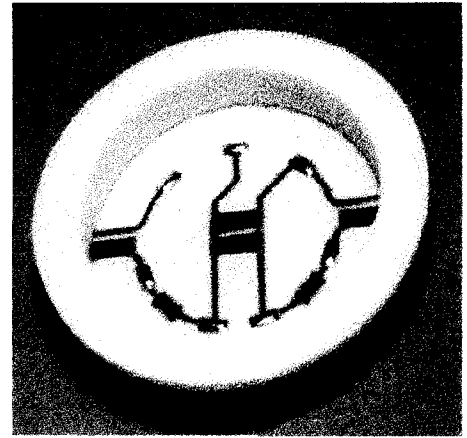


Fig.1 on the right shows the circuit of the Ceramic which consists of 4 gauges in a open wheatstone bridge. Blue and green can be closed completing the circuit. Power positive is connected to Red and power negative is connected to Blacks. Outputs are then taken from Green positive and Yellow negative. The unit can be supplied with up to 12 Vdc giving 3 mV/V nominal output. Fig.2 show the equivalent electrical circuit S+1 being connected to S+2.

A range of diameters and thicknesses are available to suit most pressure applications.

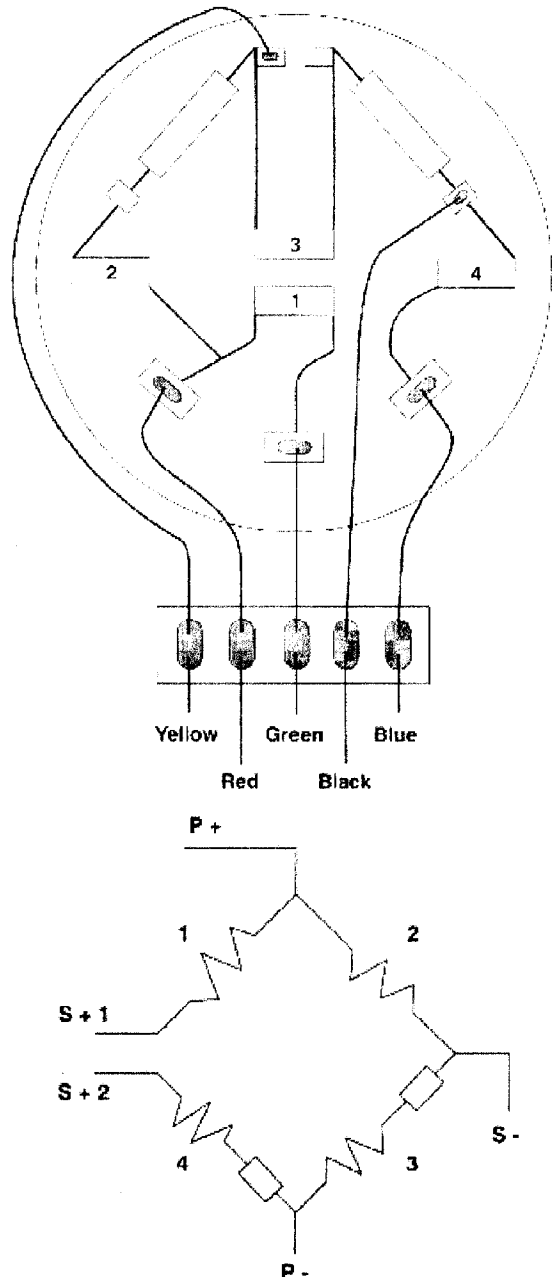
The diaphragm can be supplied for direct mounting onto customer material. Please contact Acam for specific detail.

Another form of supply is with a ceramic ring. This can be inserted against a suitable seal and clamped into the customers own metalwork.

The unit can be supplied with a PCB or Ceramic cap to the reverse side with or without wiring to the customers specific wiring allowing a minimum of expertise to generate a transducer.

Additional temperature compensation can be supplied by Acam for all the above builds.

Please contact Acam for advice on your specific application.



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