



A range of miniaturised sensors that can detect and warn of any excessive pressure or impact to almost any device. Our impact and pressure sensors have multi-directional sensing capabilities and can fit onto the control circuit board of any instrument and record any pre-determined level of shock.



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BS EN ISO 9001 : 2000 - ISO Number FM 70209

We have developed a range of impact and pressure sensors that can warn of any excessive impact or pressure to almost any device. These miniaturised, low cost impact sensors can fit onto the control circuit board of any instrument and record any pre-determined level of shock.

All of the Engel & Gibbs impact and pressure sensors are hermetically sealed and because of the high level of sensitivity have multi-directional sensing capabilities and yet are very compact in size and light-weight.

Impact and pressure sensors are ideal for use with any portable instrument which can be subject to misuse, and are particularly invaluable when used with instruments designed for medical and laboratory applications, which are expected to be reliable and accurate even when they are roughly handled or accidentally dropped. After such treatment they may be returned for a free calibration because the instrument has not proved to be reliable in service. Even worse the instrument may continue in use, the calibration error going undetected. Not a very happy situation if an analysis is critical, or the control of medication to a patient is at variance with expectation and the stability of patient is put at risk.

They are also useful aids in the detection of damage to goods in transit or can be used as part of a checking system for high value equipment, which could be easily damaged when handled by different parties.

We can supply the sensors already fitted to a PCB with scaled output for recording purposes or as a simple warning alarm. Our design engineers would be happy to discuss any application requirements with you.

#### Specification of impact sensor EGIS-001

|                            |                           |
|----------------------------|---------------------------|
| Size                       | 1.88mm dia x 6mm long.    |
| Weight                     | 0.1 grams                 |
| Sensitivity in charge ※1   | 0.079 pC/m/s <sup>2</sup> |
| Sensitivity in Voltage ※2  | 0.46 mV/m/s <sup>2</sup>  |
| Mounted Resonant Frequency | 10 kHz                    |
| Frequency Response ※3      | fc~2000 Hz +3dB           |
| Capacitance                | 170 pF                    |
| Measurement Range          | 5000 m/s <sup>2</sup>     |
| Transverse Sensitivity     | 20±%                      |
| Resistance                 | 1000±M Ohms               |
| Temperature Range          | -10 ~ +70 C               |
| Case Material              | Nickel Silver             |

