

# PIEZO STRAIN SENSOR

For any monitoring applications



## High Sensitivity Dynamic Sensor

### High Performance

- Excellent sensitivity and repeatable performance.
- Ideally suited for general purpose crimp monitoring applications.

### Integration

- Simple and low cost installation – The sensor is mounted on the frame of the press with 1 bolt.
- Designed for installation onto existing or new presses

### Compatibility

- Universally adaptable to a wide range of press models and sizes from 2 to 25 + tons.
- Electrically compatible with most Crimp Force Monitor systems.

### Reliability

- Piezo-based sensor technology with a high level of resolution, repeatability, and reliability.
- Mounting arrangement eliminates mechanical failures typically experienced with direct impact force ring sensors.
- Hermetically sealed sensor unaffected by lubricants.
- Built-in IEPE electronic circuit facilitates signal output transmitted over long cable distances using standard coax cable with no degradation from electrical or magnetic noise.

Patents  
2000 US Patent No. 7,216,625 B1

# OES Strain Sensor

## High Performance and Reliability

Strain exerted through the press frame during the crimping process is converted into high resolution electrical signals

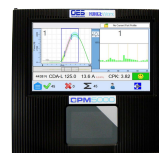
### TECHNICAL SPECIFICATIONS

Sensitivity	40	mV/ $\mu\epsilon$
Dynamic Range	120	$\mu\epsilon$
Low Frequency Limit	0.1	KHz
Resonance Frequency	14.7	KHz
Temperature Frequency (Operating)	-40 to +85	$^{\circ}\text{C}$
Supply Current	2 to 20	mA
Supply Voltage	18 to 30	VDC
DC Bias Voltage	8 to 12	VDC
Electrical Connector	Coaxial 10-32 UNF	type
Mounting Screw	M6 x20, conical head	type
Mounting Torque	10	Nm
Size	17 x 46 x 15.2	mm

# OES Strain Sensor

OES strain sensors interfaces with OES's crimp force monitors

FORCEWorx



FORCEView



Typical Piezo Strain Sensor Mounting locations  
– Steel Frame and Cast Iron Frame Presses

**OES Strain Sensor was introduced by OES for crimp force monitoring applications. Now widely adopted by the wire processing industry as a proven and effective sensor for assurance of crimp quality.**

## About OES Technologies



OES Technologies products and technologies are developed specifically for the wire processing industry to monitor and inspect 100% of parts produced during the manufacturing process, and prevent part defects from entering the supply chain. OES's dedication to innovation enables them to deliver a steady stream of cutting-edge technologies that meet the exacting demands of this ever-changing market.