

Piezo Force Ring Sensor

High sensitivity Dynamic sensor for crimp force monitoring applications



Models: application specific



Crimp Force Monitoring



Monitoring your wire crimping process and knowing when manufacturing conditions are changing is critical in detecting errors, and eliminating unnecessary scrap.

High Performance

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

Compatibility

- Universally adaptable to a wide range of press models and sizes from 2 to 10+ tons.
- Electrically compatible with most Crimp Force Monitor systems.

Integration

- Mechanical mounting into the ram of the press.
- Designed for installation onto existing or new presses.

Reliability

- Piezo-based sensor technology with a high level of resolution, repeatability, and reliability.
- 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.



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High Performance and Reliability

- Force exerted through the press coupling during the crimping process is converted into high resolution electrical signal.

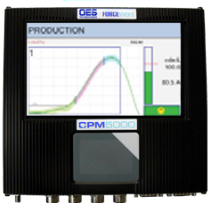
Widely adopted by the wire processing industry as a proven and effective sensor for assurance of crimp quality.

Measurement Range	Refer to specific data sheet	lb [kN]
Broadband resolution	0.1 [0.4448]	Lb-rms [N-rms]
Low Frequency Response	+/- 143	Hz
Upper Frequency Limit	60000	Hz
Temperature Range (Operating)	-54 to +121	°C
Supply Current	2 to 20	mA
Supply Voltage	18 to 30	VDC
DC Bias Voltage	8 to 14	VDC
Electrical Connector	Coaxial 10-32 UNF	type
Mounting Torque	20	Nm
Size	Refer to specific data sheet	mm

Crimp Force Monitors

OES Force Ring sensors interface with OES’s crimp force monitors

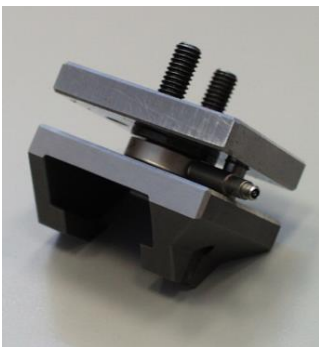
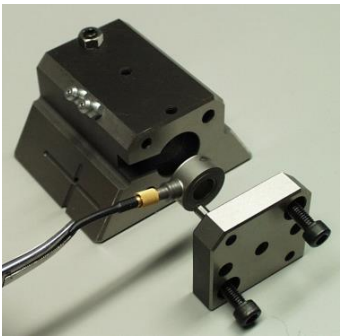
FORCEWorks™



FORCEView™



Typical Force Ring Sensor Mounting locations – in the Ram coupling of the Presses



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.

