Sensors that offer hazardous area approvals are widely used on gas and oil well heads, supply lines, natural gas power engines, multi-stage gas compressors and other machinery operating in hazardous environments. Piezoelectric pressure sensors offer the capability to detect and monitor dynamic pressure spikes, pulsations and surges in gaseous or liquid media. Engine pressure sensors offer walk-around or permanent monitoring capability, allowing engine balancing and emissions control. Vibration monitoring has proven effective for determining machinery health, planning maintenance intervals, reducing downtime and avoiding catastrophic loss.
MOTORS & PUMPS

4-20 MA VIBRATION TRANSMITTER
MODEL EX640B71
- Available in velocity or acceleration output
- ATEX / CSA approved with explosion proof conduit
- Top exit, 2-pole terminal block

LOW COST ICP® ACCELEROMETER
MODELS EX607A11 & EX607A61
- Unique 360° Swivel Design
- Allows for easy cable orientation

SHEAR ICP® ACCELEROMETER
MODEL EX622B01
- Sensitivity: (±5%) 100 mV/g (10.2 mV/(m/s²))
- Frequency Range: (±3dB) 12 to 900000 cpm (0.2 to 15000 Hz)
- Sensing Element: Ceramic

COMPRESSORS

4-20 MA PRESSURE TRANSMITTER
SERIES 1503
- Ranges from 300 to 10,000 psi
- Withstands sour gas environments
- 1/2" NPT fitting

RECIPIROCATING MACHINERY PROTECTOR
MODEL EX649A71
- Machinery RPM Range: 240 to 10,000 cpm (4 to 166 Hz)
- Sampling Time: 0.2 to 6.4 sec
- Temperature Range: -40 to 212 °F (-40 to 100 °C)

WELL HEADS

ICP® PRESSURE SENSOR
MODEL 121A44
- Sensitivity: 10 to 100 mV/psi (1.45 to 14.5 mV/kPa)
- Measurement range: 50 to 500 psi
- 316 stainless steel diaphragm
- 1/4” NPT fitting

TYPICAL INTRINSICALLY SAFE INSTALLATION

Sensor Cable
Approved, Intrinsically Safe ICP® Accelerometer

Safe Area
Intrinsic Safety Barrier

Output Cable
Vibration Data Collector or Analyzer with ICP® Sensor Power
IMI Sensors, a division of PCB Piezotronics, Inc. manufactures industrial vibration monitoring instrumentation, such as accelerometers, vibration transmitters and switches that feature rugged stainless steel housings and survive in harsh environments like paper and steel mills, mines, gas turbines, water treatment facilities and power plants. Integrating with portable analyzers and PLC’s, IMI instrumentation helps maintenance departments reduce downtime and protect critical machinery. Visit IMI Sensors at www.pcb.com. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corporation. Additional information on MTS can be found at www.mts.com.

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