As today’s factories evolve into more industrial internet of things (IIoT) friendly facilities, there is a growing focus on how sensors in industrial machinery can increase efficiency and productivity. TE Connectivity’s (TE) pressure, position, temperature, speed and vibration sensors play a variety of essential roles within machinery on the factory floor. The functions of these sensors allow facilities to utilize the best practices including predictive maintenance, asset monitoring, machine and process automation to confirm decreased downtime and increased profitability for manufacturers. Additionally, our sensors are designed to withstand harsh environmental conditions such as high temperatures or dirty surroundings while still accurately measuring and monitoring machinery.

• FORCE
• PRESSURE
• PIEZO FILM
• TEMPERATURE
• POSITION
• VIBRATION

INDUSTRIAL MACHINERY AND PROCESSES SENSORS

QUALITY STATEMENTS
• AS 9000B
• ATEX
• EN 9100
• EN 13980
• ISO 14001
• ISO 9001
• NADCAP Welding & Brazing
• NASA Qualified
**FORCE SENSORS**

**ES20**
The ES20 series low compression force sensor offers normalized zero and span for interchangeability and is thermally compensated for changes in zero and span with respect to temperature.

**FX19**
The FX90 series is intended for OEM use in laboratory, hospital or consumer product applications, establishing a breakthrough price/performance value for compression load cells.

**FX29**
The FX29 is a compact compression load cell that offers exceptional price-to-performance in a robust sensor package with a millivolt, analog, or digital output signal.

**ELAF**
The ELAF series compression and tension load cells raise the bar for high performance at low cost.

**FN3030**
The FN3030 measures tension and compression in standard ranges from 0-50 N to 0-100 000 N.

**PIEZO FILM SENSORS**

**LDT0**
The LDT0-028K is a flexible component comprising a 28 μm thick piezoelectric PVDF polymer film with screen-printed silver ink electrodes, laminated to a 0.125 mm polyester substrate and fitted with two crimped contacts.

**Piezo Cable**
The piezo cable is another form of piezo polymer sensors. Designed as a coaxial cable, the piezo polymer is the dielectric between the center core and the outer braid.

**POSITION SENSORS**

**ED-20**
The ED-20 series magnetic encoder is designed for medium duty industrial feedback applications with ball bearing supported shaft.

**CTS-420**
The CTS-420 series is a 2-wire current loop position transmitter system especially suited to measurements in process industries.

**HC-485**
The HC-485 RS-485 LVDT is a self-contained, ultra-precision, digital I/O position sensor for high performance measurements in environments containing moisture, dirt and fluid contaminants.

**RVIT**
The RVIT 15-60 and RVIT 15-120i are DC operated, non-contact, angular position sensors featuring proprietary RVIT (Rotary Variable Inductance Transducer) technology.

**KMA36**
The KMA36 magnetic encoder is an excellent solution for reliable and precise measurement in innovative and rugged applications.

**PRESSURE SENSORS**

**MS4515DO**
The MS4515DO is a small, ceramic based, PCB mounted pressure transducer.

**MS4525DO**
The MS4525DO is a small, ceramic based, PCB mounted pressure transducer.

**U5200**
The U5200 series +/-1.25% TEB pressure transducer from the ultra-stable line offers maximum flexibility for different configurations with its modular design.

**U5300**
The instrument grade U5300 series +/-0.5% TEB pressure transducer from the ultra-stable line offers maximum flexibility for different configurations with its modular design.

**TEMPERATURE SENSORS**

**TSEV**
The TSEV is a contact less temperature measuring system for OEM use based on the detection of infrared radiation.

**10K NTC Probe**
The 10K ohm resistance NTC micro thermistor probe is soldered to 30 AWG solid silver plated copper wire with PVDF insulation and potted in a polyimide tube with thermally conductive black epoxy.

**Pipe Probe**
The pipe probe series PRO4-overmolded probe consists of a NTC thermistor soldered to a 24 AWG stranded TPE cable and potted in a copper housing. The assembly is over molded leaving the copper housing exposed. A metal clip is attached to the final assembly.

**VIBRATION SENSORS**

**8021**
The model 8021-01 & 8022-01 are internally shielded rugged IEPE accelerometers designed for harsh environments.

**4000A**
The 4000A amplified uniaxial economy accelerometer offers a signal conditioned output with an integral temperature compensation dynamic range of ±2g to ±100g.

**8911**
The 8911 wireless accelerometer sensor is designed for vibration monitoring in applications such as predicative maintenance and condition monitoring.

**PIPE PROBE**
The pipe probe series PRO4-overmolded probe consists of a NTC thermistor soldered to a 24 AWG stranded TPE cable and potted in a copper housing. The assembly is over molded leaving the copper housing exposed. A metal clip is attached to the final assembly.