

# INNOVATIVE PRODUCTS FOR INDUSTRIAL CONTROL APPLICATIONS



Industry requirements are evolving to more flexible, re-configurable production machinery and factory systems supporting new economics of competitive manufacturing. The expanded focus on manufacturing efficiencies requires intelligent production equipment with integrated diagnostic capabilities to ensure maximum asset utilization and uptime. The importance of immediate response to machine down-time has led to the convergence of factory and office systems with real-time data and operations visibility from the executive suite to the factory floor.

The control cabinet is the central place where machinery information converges and is processed. This makes user-friendly control circuit wiring key when it comes to supporting sophisticated automation features. TE has industrial control solutions for both electromechanical and electronic components. Whether for new system design, or for retrofitting existing systems, our engineers have created reliable, easily installable components that help save on machine maintenance costs and prevent downtime.



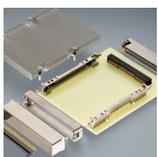
## ANTENNAS

Accommodate numerous sets of frequency bands for operation on most networks — in either regional or global markets



## FORCE SENSORS

Measure static or dynamic force and torque in demanding applications such as steel mills, power plants, and general machine functions



## CFP PLUGGABLE I/O

Support 40 Gbps and 100 Gbps Ethernet applications at 10 Gbps data rates per channel



## FULLAXS/FULLAXS MINI CONNECTOR SEALING & CABLE ASSEMBLY SYSTEM

Enables one-handed, blind installs from any angle with a product that is scalable to meet most any infrastructure requirements



## DWFR HEAT SHRINK TUBING

Withstand mechanical stress, resist moisture ingress and protect components and wiring with highly flame retardant tubing



## HEAVY DUTY CONNECTORS

Allow for easy assembly of the modular inserts, minimize installation cost and maximize machine modularity with unique, time saving 1-piece connector frame



## ELCON MINI POWER I/O CONNECTORS

Support a rating higher current than similar small sized solutions (up to 40 A per contact, 400 Volts AC or DC)



## POSITION SENSORS

Measure displacement (stroke), thickness, travel, rotation, and inclination (tilt). Designed for demanding applications in processing plants, factories, and machine automation.



### **POWER DATA COMMUNICATIONS CABLE ASSEMBLIES**

Offer a highly customizable solution with standard or high-flex cable assembly designs for easier routability



### **SIAMEZE TERMINALS**

Provide a compact solution for clean metal-to-metal termination of magnet wires without stripping



### **POWER KEY CONNECTORS**

Deliver power to board while optimizing contact seating and proper mating to the PCB header



### **SINGLE WALL FLAME RETARDANT (SWFR) TUBING**

Enable electrical insulation and mechanical protection with halogen-free, UL-VW 1 rated irradiated polyolefin tubing



### **POWER TRIPLE LOCK CONNECTORS**

Offer reliability with audible lock and 3 different locking mechanisms handling up to 20A in different materials to support various temperature and flammability ratings



### **TEMPERATURE SENSORS**

Measure low and high temperature in a wide range of environments. Designed for demanding applications in power plants, chemical plants, wind farms, and general machine automation.



### **PRESSURE SENSORS**

Maintain high reliability and stability while measuring extremely small changes of applied pressure. Designed for demanding applications, in steel mills, factory automation, and machine functions.



### **ZHD HEAT SHRINKABLE WIRE IDENTIFICATION LABELS**

Enable both low fire hazard and diesel resistance in a single cable identification solution



### **SFP PLUGGABLE I/O CONNECTORS**

Support applications up to 4 Gbps with single port, ganged and stacked cages and a 20 position PT connector