

TE CONNECTIVITY SOLUTIONS FOR MOTORCYCLES

EVERY CONNECTION COUNTS



INDUSTRIAL & COMMERCIAL TRANSPORTATION /// CONNECTIVITY SOLUTIONS FOR MOTORCYCLES

TE CONNECTIVITY (TE) : THE RIGHT PARTNER FOR TRANSPORTATION CONNECTIVITY SOLUTIONS



TE Connectivity is your source for innovative technologies, products and solutions for automotive, commercial vehicle and **motorcycle OEMs and Tier 1 suppliers**. Our technologies are a vital part of advanced safety systems, highly integrated engine controls, power management systems, infotainment applications, sensors and hybrid and electric vehicles.

Our broad product offering includes terminals and connectors, custom cable assemblies, sensors, relays and switching modules, inductive systems, high power components for hybrid vehicle systems, high-speed data networking, wire and cable, heat shrink tubing, sealing gels, application tools and protection products. Our global footprint with local manufacturing makes TE Connectivity an end-toend connectivity solution provider in **developing your automotive, commercial vehicle and motorcycle applications**.



A GLANCE AT TE CONNECTIVITY IN TRANSPORTATION



TE is the leader in all major automotive markets



TE offers a **broad product portfolio** including sensors, cable assemblies, antennas, hybrid electric mobility solutions (HEMS), infotainment, connectors, lighting & relays.



Harsh Connectivity – with the acquisition of DEUTSCH, TE Connectivity is the market leader in connectivity solutions for extreme environments.



With over **3,000+** engineers around the globe, we provide local solutions and support.



We provide current and next generation connectivity solutions for **motorcycle OEMs** throughout the world.



WORLDWIDE PERSPECTIVE. CLOSE TO OUR CUSTOMERS.

TE designs, manufactures and delivers products, systems and solutions in over 150 countries. This global reach enables us to work closely with our customers and identify and act on local needs quickly. By leveraging our global scale we can deliver the highest levels of quality, innovation and service at a local level.



Manufacturing Sites

LOCAL ENGINEERING & SALES SUPPORT

Our sales and engineering teams provide local support and services through innovative ideas and solutions. By leveraging global resources we provide unparalleled customer support making every connection count.



INDUSTRIAL & COMMERCIAL TRANSPORTATION /// CONNECTIVITY SOLUTIONS FOR MOTORCYCLES

CONNECTIVITY SOLUTIONS FOR SMARTER MOTORCYCLES

Our products make the critical connections for motorcycle applications supporting the trends of tomorrow.



SAFETY

Connecting safety applications like sensors, inductive systems, ABS (Anti-Lock Brake System), and anti-theft systems when and where you need them most.

RELIABILITY

Delivering safe, effective, high-quality products and services on time. Our products are developed through advanced engineering, consistent, repeatable manufacturing processes, continuous quality procedures for low rate ppm, and higher performance and product standardization.



DIFFERENTIATION

Creating innovative new products for advanced technologies like digital meters/clusters, smart-key, answer-back systems, infotainment, and LED lighting. We are a single source for complete product integration, and provide local engineering, manufacturing, and technical support.

TE SOLVES CONNECTIVITY CHALLENGES TO MAKE EVERY RIDE COUNT



Connecting applications that enable a greener, more fuel-efficient future with connectivity solutions for ECU/EFI, hybrid & electric applications, start-stop systems, and on-board diagnostics.



CONNECTED

Enabling communication for the connectivity needs of today and tomorrow through V2X (Vehicle to Everything), telematics solutions, navigation systems, antennas, and autonomous driving.



INNOVATION

Providing solutions today for the challenges of tomorrow. Including SmartSeal headerless ECU technology, LITEALUM crimp technology, modularization, and Nano/PicoMQS interconnect miniaturization.

INDUSTRIAL & COMMERCIAL TRANSPORTATION /// CONNECTIVITY SOLUTIONS FOR MOTORCYCLES

CONNECTIVITY SOLUTIONS FOR MOTORCYCLES



Click on the products to learn more

SUPERSEAL 1.0

- 1.0 mm superseal, round style pin header.
- Compact system minimizes packaging requirements.
- Sealing reliability under harsh conditions.
- Designed for ease of manual harness assembly, engine mounting and under hood environments.



1.0 SEALED

- Field proven environmentally sealed connector designed for two-wheel vehicles.
- 1.0 mm width tab & receptacle contact system for high performance and reliability.
- Mat seals allow high packaging density for design flexibility.
- 33 position header available for potted applications.
- 16 and 33 position plug housings available.



SMARTSEAL 44P

SMARTSEAL - HEADERLESS ECU CONNECTOR FOR HARSH ENVIRONMENTS

- Headerless, environmentally sealed PCB connector.
- Proprietary single contact beam terminal design for low mating force.
- Terminal's wave structure PCB contact zone provides extreme level of performance.



ABS CONNECTORS

- Widely used connector interface for two-wheel ABS Modules with 14, 16, and 18 position arrangements.
 - 14 position plug housing accepts MCP 1.5K receptacle contacts.
 - 16 position plug housing accepts 1.0 Sealed receptacle contacts.
 - 18 position plug housing accepts MCON 1.2 & 2.8 Sensor flat receptacle contacts.
- TE Connectivity offers field proven sealed ABS connectors, as well as the ability to develop new connector interfaces to meet customer requirements.



ABS MODULE

- TE Connectivity offers ABS modules combined with coil assemblies for both four-wheel and two-wheel vehicles.
- By utilizing connector technology, manufacturing resources and engineering experience, TE Connectivity can customize products to meet customer requirements.
- Proficiencies in stamping, molding, stitching, coil winding, and multi-spring terminals to eliminate soldering processes, are just some of the TE Connectivity proficiencies for ABS Modules.



025 CONNECTOR SYSTEM

- Designed especially for motorcycle and vehicle instrument clusters.
- Suitable for soldering using through-hole reflow process.
- PCB fixation options available in both screw and plastic locking.
- Available in 16, 24 and 40 cavity arrangements.
- Utilizes TE's reliable 0.64 automotive industry terminal.





- Connector series for waterproof protection and rugged construction.
- The use of Econoseal sealed housings helps prevent premature aging of and damage to electrical contact systems subject to extreme conditions, including moisture, dust, corrosive gasses and liquids.
- Typical applications include the wiring of sensors in the interior of motor hoods and connections to electrical control systems under extremely unfavourable climatic conditions.

MQS COMPACT CONNECTOR PACKAGES FOR HIGH FUNCTIONAL REQUIREMENTS

- The MQS interconnection combines the features of high packing density, robust construction and high functional requirements.
- The internal contact body provides all electrical and electromechanical functions, while the superimposed steel cantilever spring protects and retains the contact.
- The MQS contact is designed for electronic and electrical applications in motorcycles, where vibration and mechanical stress can, in the long term, affect the quality of conventional contact systems.

NANOMQS CONNECTOR MINIMIZE SIZE, MAXIMIZE PERFORMANCE

- An interconnection system offering an exceptional level of vibration resistance (for instance up to 40g sinus for the sealed version).
- NanoMQS connectors' small wire cross sections down to 0.13 mm help pave the way for harness weight saving measures.
- These connectors reduce the footprint on the PCB by roughly 50% and still offer up to 3 amps of nominal current carrying capacity.
- The first generic connectors offer up to 32 contact positions in the top latch version, the even more compact side latch version has up to 20 positions.









MCON CONTACT RELIABILITY FOR LONG-TERM USE

- Base material with high current capacity.
- 8 or more defined contact points for increased reliability.
- Improved vibration resistance.
- Good guiding inside the cavity.
- Protected contact spring due to the closed box.
- Overstress protection of the contact springs.
- Box with polarization and secondary locking feature.
- Protected locking lance.

GET 0.64 INTERCONNECTION SYSTEM

- Wire-to-wire, wire-to-board and wire-to-device.
- Sealed and unsealed connector housings available (straight mate or lever actuated).
- Mat seals allow high packaging density.
- Design allows for specific pinout versions, no blind plugs necessary in sealed applications.
- Suitable for instrument cluster, body control modules, actuators, switches, sensors etc.



LITEALUM CRIMP MAKING EVERY OUNCE COUNT

- Highly stable contact resistance to wide temperature fluctuations and moisture, as well as very good corrosion-resistance and high withdrawal forces.
- Qualified 18 different contact systems on the basis of the new LITEALUM crimp.
- It can be used to process aluminum stranded 2 conductors with lead cross-sections of 1.5mm² to 10mm².





RELAYS - EVERY SIGNAL COUNTS

- Performance classes from 10A up to 2000A.
- System voltages from conventional 12/24VDC vehicles to hybrids and electric vehicles up to 750VDC.
- Connection types such as plug-in and PCB mount, as well as screw terminals. Sealed options available.
- Typical motorcycle applications include ECU protection, fuel pump, cooling fan, head lamp, etc.







SENSOR- SMARTER SENSORS FOR SMARTER MOTORCYCLES

- TE offers a wide range of sensors for motorcycles applications, including position, speed, fluid level, pressure, temperature, current sensors for engine & exhaust, transmission, chassis, brake, battery, e-motor, humiditytemperature, tilt sensor etc.
- Acquisition of Measurement Specialties and WEMA makes TE a world leader in sensors.



HEAT SHRINK TUBING-MAKING INSTALLATION FAST AND EASY

- Wide range of sizes, colors, and materials.
- Conforms to the size and shape of the underlying material.
- Fast and easy installation.
- Customization of specs and tolerances.
- Special-purpose compounds.
- Custom formulation for dual wall tubings by varying jacket and adhesive combinations.







WIRE & CABLES-MEETING THE RIGOROUS DEMANDS OF TRANSPORTATION INDUSTRY

- Smaller, lighter more flexible wires providing easier installation.
- Designed to be compatible with typical wirehandling equipment used in harness shops through the unique bonding of the two layers.
- High level of compatibility with materials used in the harnessing process.
- Thin-wall designs providing improved handling and space savings.
- Low friction characteristics slides over bundles (resists blocking at high temperatures).

SLIMSEAL CONNECTOR FOR LIGHTING

- Achieve an ideal solution for dust and waterproof applications with an IP67-rated connector.
- Save PCB space with a compact design for 22 18 AWG (0.33 0.75 mm²) wire sizes.
- Available in both wire-to-board and wire-to-wire connector system in two and three position configurations.
- Suitable for harsh environment applications such as lighting and other high humidity applications.
- A press-to-release spring latch ensures that connector mating is secure.
- Comes in three different colors enabling easy identification and assembly.

MINI MULTI LOCK

- 7 position wire-to-wire connector.
- Sealed and unsealed are available.
- Compact and smooth design with flat lock structure.
- Matt seal for easy assembly.
- 0.8 mm width Tab & Receptacle contact.







DEUTSCH DT

- Wire-to-wire, wire-to-device, and wire-to-board.
- Accepts contact size 16 (13 amps) and 14-20 AWG (2.50-0.50 mm²).
- 2, 3, 4, 6, 8, and 12 cavity arrangements.
- Rectangular, thermoplastic housing with integrated latch for mating.
- Wedgelocks confirm contact alignment and retention.
- Available accessories: Backshells, boots, dust caps, gaskets, mounting clip.



HDSCS

- Wire-to-wire and wire-to-device.
- Accepts contact sizes 6.3/4.8K (up to 40 amps), 2.8 (up to 40 amps), and 1.5K (up to 20 amps) and 6.00-0.20 mm² wire.
- 2, 3, 4, 6, 7, 8, 10, 12, 15, 16, and 18 cavity arrangements.
- Rectangular, thermoplastic housing.
- Slide lock for mating and integrated secondary lock confirms contact alignment and retention.
- Available accessories: Backshells, fixing slide, clips, sealing covers, blind plugs.



SUPERSEAL 1.5

- Wire-to-wire and ECU applications.
- Accepts contact size 1.5 mm (up to 14 amps), and 0.35-2.5 \mbox{mm}^2
- 1, 2, 3, 4, 5, and 6 cavity arrangements.
- Rectangular, thermoplastic housing with integrated latch for mating and secondary lock confirms contact alignment and retention.
- Available accessories: Boots and blind plugs.





HIGH-VOLTAGE SOLUTIONS

AMP+ HVA 280

2- or 3-position, touch-safe connectors and headers for low to medium current applications.

AMP+ HVA 630

Touch-safe connectors and headers for currents up to 40A at 140° C ambient temperature and voltages of up to 850 V DC.

AMP+ HVP 800

Sealed and shielded pluggable connectors with up to 200A at 85° (depending on wire cross section). Used e.g. to connect HV battery and inverter or in charging applications.

CHARGING INLETS

AMP+ charging inlets are a modular system, sharing identical parts between inlet Types 1, 2, and GB.



SEALED MINI FUSE HOLDER

- Compact size.
- Accommodates two active and two spare fuses.
- Environmentally sealed IP67 rating.
- Available with integrated mounting feature, or dovetail that accepts mounting clips.
- Due to mounting being on the housing assembly instead of the cover, there is a reduced applied load on the seal, which provides a more robust seal interface.
- Quickly and easily add a sealed fuse anywhere.
- Several mounting options, with readily available mounting clips.
- Accepts industry standard mini fuses.
- Uses high performance AMP MCP terminal system for proven reliability.



APPLICATIONS

	ECU Applications	Anti-lock Break Applications	Meter Cluster Applications	Wire-to-Wire Applications	Sensor & Device Interface Applications	High-Voltage Applications	Relay	Fuse Box	Sensors (TPS, WSS, ETC)
Superseal 1.0	\checkmark		\checkmark						
1.0 Sealed	\checkmark	\checkmark							
SmartSeal	\checkmark								
Mini Multi Lock				\checkmark					
025 Family	\checkmark		\checkmark	\checkmark					
Superseal 1.5				\checkmark	\checkmark				
Econoseal				\checkmark	\checkmark				
MQS	\checkmark		\checkmark	\checkmark	\checkmark				
Nano MQS	\checkmark			\checkmark	\checkmark				
MCON	\checkmark	\checkmark		\checkmark	\checkmark				
HDSCS				\checkmark	\checkmark				
DEUTSCH DT Series				\checkmark	\checkmark				
Slimseal				\checkmark	\checkmark				
LITEALUM				\checkmark					
Sensors		\checkmark							\checkmark
Heat Shrink Tubing				\checkmark					
Wire & Cable				\checkmark					
Sealed Mini Fuse Holder				\checkmark				\checkmark	
HVA280/630 HVP800						\checkmark			
Charging Inlets						\checkmark			
Relays							\checkmark		

TE Connectivity Industrial & Commercial Transportation

Asia: +86-400-820-6015

Europe, Middle East, & Africa: +49-6251-133-0

North America: +1-888-441-9982

te.com/ict

Stay connected:	Econoseal, DEUTSCH, MULTILOCK, MQS, NanoMQS, MCON,LITEALUM, TE Connectivity, TE Connectivity (logo) and							
www.te.com/ict www.te.com	EVERY CONNECTION COUNTS are trademarks of the TE Connectivity Ltd. family of companies.							
	© 2015 TE Connectivity Ltd. family of companies. All Rights Reserved							
Contact us: motorcycles@te.com	While TE Connectivity has made every reasonable effort to ensure the accuracy of the information in the document,							
	TE Connectivity does not guarantee that it is error-free, nor does TE Connectivity make any other representation,							
Phone:	warranty or guarantee that the information is accurate, correct, reliable or current. TE Connectivity reserves the right							
+91-80- 33195000	to make any adjustments to the information contained herein at anything without notice. TE Connectivity expressly							
	disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied							
Fax:	warranties of merchantability or fitness for a particular purpose. The dimensions in this document are for reference							
+91-80- 33195498/99	purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult							

TE Connectivity for the latest dimensions and design specifications.