

INTRODUCING

HEAVY DUTY SEALED CONNECTOR SERIES WITH MATEnet INSERTS

1 GB/s automotive ethernet interconnection technology to meet the tough requirements of commercial transportation

POWERFUL DESIGN

The Heavy Duty Sealed Connector Series with MATEnet inserts is a rugged, heavy-duty thermoplastic connector combined with TE Connectivity's MATEnet interconnection system. This wire-to-wire and wire-to-device connector program was designed to meet your reliability and quality needs; it offers flexibility as you can implement multiple hybrid interfaces and scalability by using unshielded or shielded twisted pair. It is made to perform in the toughest and harshest environments at the best cost-benefit ratio for these requirements.

OUR PORTFOLIO WAS ENGINEERED TO SOLVE TECHNICAL CHALLENGES ACROSS THE GLOBE

- MATEnet connector systems
- High reliability status supported for long term use
- Optimal design to improve reliability, reduce manufacturing and service cost
- Connection secured with the built-in secondary locking feature for contact retention
- Clear handling, low mating force with reliable slide locking mechanism delivered in pre-locked position
- Design with the modular application in mind for wire-to-wire and wire-to-board allowing several mounting options: inline, sealed flange, and PCB mount.
- Compatible with IEEE 100BASE-T1 (IEEE802.3bw) with 100 Mbit/sec and IEEE 1000BASE-T1 (IEEE802.3bp) with 1 Gbit/sec
- Scalable for interconnection with, Unshielded Twisted Pair (UTP) and Shielded Twisted Pair (STP) within the same connection system
- Proper connection with mechanical polarization, several keyings

OPERATING ENVIRONMENT

- Dust, dirt, and moisture
- Reduce environmental failure with IP67 and IP69 (with backshell) rated connectors
- Temperature range: -40°C to +120°C
- Vibration and mechanical shock resistance



Heavy Duty Sealed Connector Series with MATenet inserts

Product Introduction

SOLUTIONS FOR DEMANDING ENVIRONMENTS



Radar/Lidar



Cameras



Telematics
Units



Onboard
Diagnostics



Infotainment
Applications



Ethernet

WHAT'S GOING ON IN DATA CONNECTIVITY?

Today's vehicles utilize new functionalities that help increase productivity, while also driving down the total cost of ownership. Customers are demanding increases in driver assistance, advanced safety features, and automated driving functions. These new functionalities are changing technology and products, resulting in the need for more connectivity. Features such as automatic braking, vehicle communication with the depot or head office, and 360° view cameras are becoming basic requirements for new vehicles. Commercial vehicles of the future will "know" more about their environment and the route ahead.

For instance, truck platooning reportedly reduces fuel consumption. Advanced Driver Assistance Systems (ADAS), which gradually develop into autonomous driving, are realized by a range of sensors (camera, radar, lidar). Some of these sensors will need to be positioned on the truck where they will be subjected to harsh conditions. All sensors must be interconnected with a network that can transmit high data with low latency throughout the truck, which enables all information to be processed in one or more electronic control units (ECU). This creates a fused model of the environment, allowing the vehicle to achieve autonomous driving in all situations. Our engineers understand how commercial vehicles are advancing and understand the types of harsh environments they will face. To meet the needs of the future, we developed the new sealed Heavy Duty Sealed Connector Series with MATenet inserts ethernet connector.

PRODUCT FEATURES

- Compliant with industry standard protocol IEEE802.3bp, 100base-T1 & 1000base-T1 (1Gb)
- IP67/IP6K9K (with backshell) dust and water protection
- Temperature range from -40°C to +125°C (cable dependent)
- PoDL Class 3 - 48 Volt
- Hybrid connection solution - ethernet + power
- Capable of multiple wire sizes based on application needs
- Allows the use of wide range of accessory parts from the Heavy Duty Sealed Connector Series product line



AVAILABILITY MATenet + six AMP MCP 1.5K *

Description	AMP MCP Contacts	Product Group Drawing	Part Number
Receptacle Housing	Receptacle, 1.5K	1241436	9-2331355-1
Tab Housing	Tab, 1.5K	1355055	9-2334935-1

*Parts available for order through local TE account representative

te.com/dataconnectivity

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