



Solutions for Commercial Aerospace



EVERY CONNECTION COUNTS

Solving the Tough Issues

Count on TE Connectivity for innovative solutions in meeting the challenges of the next generation of flight:

- Weight reduction
- Size reduction
- Complexity reduction

- Increased bandwidth
- EMI protection
- Lightning protection

- Clean, reliable power
- Mechanical and environmental robustness

Higher Bandwidth for Advanced Avionics

In today's electronically sophisticated, networked aircraft, higher bandwidth enables the full capabilities of such sophistication to be realized. We support the high-speed needs of avionics to ensure optimal monitoring and control of all flight systems with advanced optics, Quadrax connectors and QUADLITE cable, and the next-generation of industry-standard connectors.

Our high-speed backplane connectors support the needs of high-density, high-bandwidth electronics with flexible packaging options, high signal integrity, and a small footprint.

FASTER, SMARTER CONNECTIVITY FOR MORE INTELLIGENT AIRCRAFT



VITA 66/67 OPTICAL AND RF MODULES



RUGGED OPTICAL INTERCONNECTS

Get more flexibility in VPX backplane applications with optical and RF connectivity to allow LRUs and LRMs to be disconnected at the backplane. Our optical modules for VITA 66 support MT, ARINC 801, and expanded beam contacts, while VITA 67 RF modules support four or eight blindmate SMPM contacts.

Optical technology saves weight and space and offers inherent EMI immunity. We offer you more choice in single- and multichannel connectivity using precision 1.25 and 2.50 mm ceramic ferrules, expanded beam, and MT multifiber termini for both rectangular and circular connectors.



Solutions for Avionics

- High-Speed Backplane Connectors
- Rack-and-Panel Connectors
- I/O Connectors
- Rectangular Connectors
- Circular Connectors
- Fiber Optic Products
- Microminiature and Nanominiature Connectors
- Coaxial, Triaxial, Quadaxial Cable and Connectors
- High-Frequency Filtering-Effect Wire
- Signal-Level and Solid-State Relays
- Circuit Breakers
- Backshells (EMI and Strain Relief)
- Identification Labels



HIGH-SPEED NETWORKING



CEELOK FAS-T CONNECTORS



MULTIGIG RT 2-R CONNECTORS

Our high-speed copper solutions increase aerospace networking performance. TE's Quadrax contacts support 100-ohm Gigabit Ethernet and 150-ohm Fibre Channel. The system includes contacts, QUADLITE cable, and inserts for industry-standard circular and rectangular connectors.

The smallest, field-repairable, 10G Ethernet connector for aerospace applications. Compatible with a variety of high-speed cables and protocols, CeeLok FAS-T connectors are ruggedized for excellent shock, vibration, temperature, and sealing performance, and feature an integral backshell for low cost, low-weight strain relief, and EMI protection.

Ultra-rugged VITA 42-compatible connectors with quad redundant contacts for exceptional performance in high-vibration environments and supporting speeds to 10 Gb/s to extend the potential of VPX systems.

Copper or Fiber at Gigabit Speeds

Boost the performance of any cabin with flexible in-flight entertainment, web access, automated galley systems, and high-speed networking. We can provide interconnection solutions based on standards such as ARINC 664, 809, 810, and 832 and GAIN and 4GCN to achieve the right combination of performance and flexibility, allowing cabins to be modularly configured for passenger convenience and comfort and for greater crew efficiency.

Save space, reduce weight and handle tight radii easily with our cable and connectors—designed to install faster, perform better, and increase in-cabin capabilities through plug-and-play of equipment.

ADD PERFORMANCE FROM SEAT TO GALLEY



EN4165 MONOMODULE CONNECTORS



HOOK-UP WIRE

Designed for IFE applications and cabin systems, these light weight single module connectors feature lightweight composite housings and push-pull mating. They are available with a wide assortment of inserts for signal, power, optical, and high-speed connectivity. They have become the standard for 3GCN and 4GCN interconnections.

Our flight-ready hook-up wire sets new levels for reduced size and weight in single- and dual-wall constructions. With temperature ratings from -65°C to 200°C, low smoke and corrosive gas generation, and resistance to electrical arc tracking in both dry and wet conditions, our hook-up wire also offers excellent abrasion and cut-through resistance and flexibility.

Solutions for Cabin Interiors and IFE

- High-Speed I/O Connectors
- EN4165 and ARINC 809 Connectors
- Galley Insert (GAIN) Connectors
- Circular Connectors
- Rectangular Connectors
- D-Subminiature Connectors
- High-Speed Copper Cables
- Custom Multicore Cables
- Coaxial, Triaxial, Quadaxial Cable and Connectors
- Fiber-Optic Products
- CANbus Networking



369 SERIES CONNECTORS



RECTANGULAR CONNECTORS



D-MAX CONNECTORS

For applications such as lighting requiring fewer contacts per connector, the new 369 Series connectors feature aerospace-grade materials to meet stringent smoke, toxicity, flammability and sealing requirements.

Our comprehensive range of high-density rectangular connectors gives you the flexibility to meet virtually any interconnection need. Inserts support single-ended and differential signals, optical, power, and RF needs in a wide variety of combinations. Choose from traditional ARINC styles, GPR connectors for galleys, or a range of reduced-footprint microminiature connectors.

Available in both 38999 and ARINC 809 styles, D-MAX connectors handle speeds of 10 Gb/s and more, making them the ideal choice for 10G Ethernet, IEEE 1394, USB 3.0 and other high-speed protocols. The termination and assembly is fast and straightforward, including the ability to field terminate and repair in as little as 5 minutes.

Performance for the Extremes

The demanding environments of engines, landing gear, and wings present challenges in temperature extremes, vibration, mechanical abuse, and potential exposure to hydraulic oils and other fluids. From sealed relays and sensors to rugged wire and cable, you will find products that perform better, install easier, and stand up to the stresses of flight. As traditional hydraulic and mechanical systems are replaced with sophisticated electronics, you need robust solutions that can withstand the severe conditions of flight while maintaining mechanical and electrical integrity. From initial design stages to aftermarket maintenance and upgrades, we will work with you to increase performance and lower costs.

MANAGE DEMANDING ENVIRONMENTAL CONDITIONS



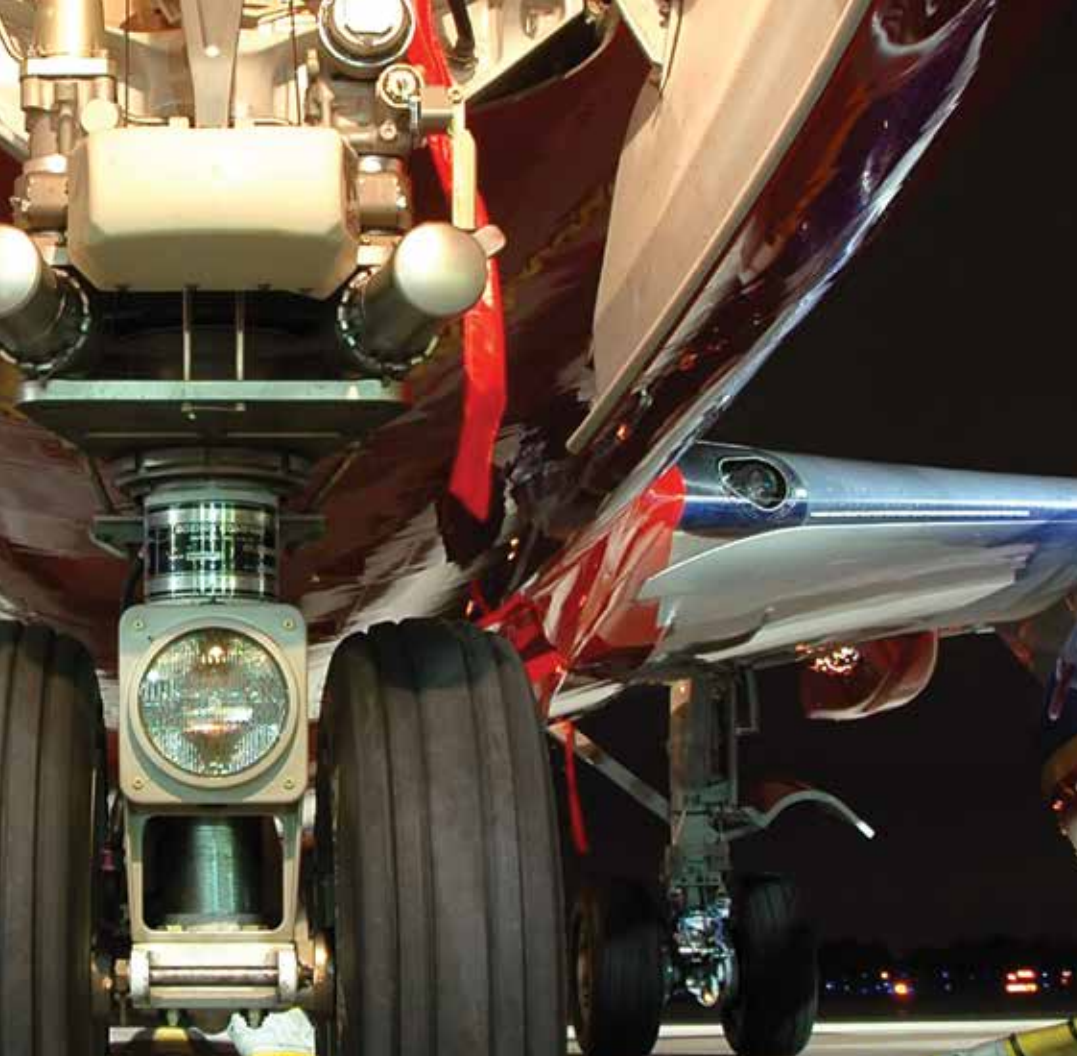
RUGGED SEALED CABLE ASSEMBLIES



983 SERIES CONNECTORS - ESC10 - BACC63

Integrated harnesses provide ready-to-install solutions that mean reliability in the toughest application environments. Every assembly meets your requirements for sealing, moisture and chemical resistance, shielding, strain relief, flexibility, and ease of use.

High-vibration connector with anti-decoupling device for high temperature areas and harsh environments. The connectors are available with or without an integral backshell.



Solutions for Wings, Landing Gear, and Engines

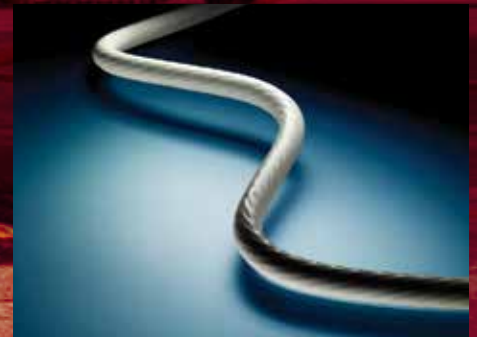
- High-Temperature, Vibration-Resistant Circular Connectors
- High-Temperature Wire and Cable
- Hermetic Connectors
- High-Power and High-Voltage Contactors
- Solenoids
- Sensors
- Firewall Feedthroughs and Conduit Systems
- Heat-Shrink Tubing and Molded Parts
- Identification and Hydraulic System Labels



FILTER CONNECTORS



SENSORS



SHF-260 CABLE

By incorporating electronic components to provide EMI filtering or transient protection, superior performance can be obtained, with the additional benefits of saving space, weight and system cost.

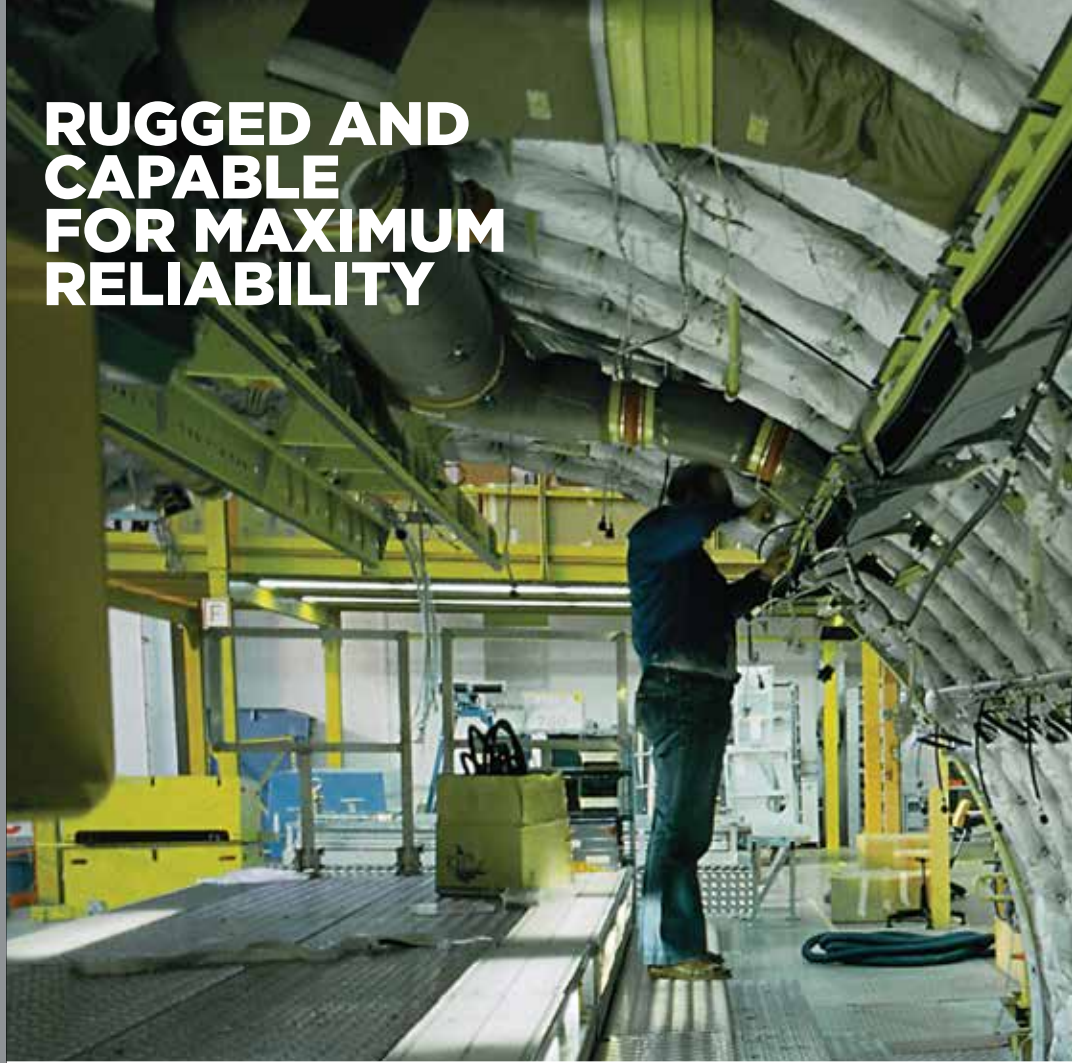
A full range of sensors, from components to custom-made assemblies like the steering feedback sensor pictured above, make use of titanium and carbon fiber to reduce weight and contactless design to withstand the temperature, shock, and vibration of flight.

With a rating of 260°C, SHF-260 highly flexible cable can be bent and routed in extremely tight areas where conventional wire often wrinkles or cracks, and can be used for primary and secondary power distribution where high currents are needed.

Reduced Weight Increases Fuel Efficiency

With a large commercial aircraft containing upwards of 350 km of wiring, significant weight savings are possible with our thin-wall cables, rectangular and circular composite connectors, and optical interconnects. We put our expertise in materials science to work in creating cables and connectors that are smaller and lighter. Not only do they save space for easier routing, they open new possibilities for advanced capabilities such as fly by wire. All while giving you the robust mechanical and environmental performance needed.

RUGGED AND CAPABLE FOR MAXIMUM RELIABILITY



HEXASHIELD BACKSHELLS



WILDCAT 38999 AND MICRO CONNECTORS

For superior EMC protection, HexaShield adapters represent a significant improvement over pigtail termination methods by providing 360-degree shielding on the termination area of each individual cable. HexaShield adapters are simple to install, easy to maintain, and dependably resistant to mechanical and environmental stresses.

Wildcat connectors provide the highest contact density in 38999 style connectors. The range is also complemented with a series of micro connectors for use where space is at a premium.



Solutions for Electrical Interconnection Harnesses

- High-Temperature and High-Performance Wire and Cables
- Controlled Electrical Cables
- Harsh-Environment Harnesses
- Power Connectors
- Vibration-Resistant Connectors
- Bulkhead Feedthroughs
- Terminals and Splices,
- Shield Terminations
- Heat-Shrink Tubing and Molded Parts
- Terminal Blocks
- Identification Labels



POWER CONTACTORS AND RELAYS



D-EASY SERIES PRESSURE SEAL FEEDTHROUGHS



HIGH-TEMPERATURE DEVICES

Our lightweight contactors and relays handle high-power DC and AC needs. They are available hermetically or environmentally sealed, with a variety of electrical configurations, power ratings, voltage ratings, and mounting styles to make your electrical system more reliable and capable.

For bundle and wire applications, D-EASY offers easy mounting and fast installation. The removable seal fitting allows rework of the seal in situ without wire removal. D-EASY is available with or without shielding protection and accessory interfaces. The overall housing is a lightweight composite, available unplated or nickel plated, with fluorosilicone gaskets and seals.

TE's shield termination devices provide environmentally protected shield termination on cables that are designed for applications requiring a maximum temperature rating of 200°C in the aerospace applications industry.

Fly Lighter with Advanced Reliability

Our commitment is to giving you advantages in higher performance, lower costs, and greater efficiencies in designing, building, and maintaining commercial aircraft. Whether it's a corporate jet, a commuter aircraft, or a jumbo jetliner, we are continually innovating to give you the best combination of cost and performance.

Innovation for the Next Generation of Aerospace

We lead the industry in innovation by bringing together expertise in materials, processes, physics, and manufacturing. We use sophisticated computer modeling of the magnetic, thermal, mechanical, and electrical parameters of a design to ensure optimum performance. Then we engineer the product for easier use, longer reliability, and lower applied cost.

See Our Full Product Lineup

For additional products for the Commercial Aerospace Markets, visit our internet site at: www.te.com/adm or www.deutsch.net for DEUTSCH connectors.

TE Components ... TE Technology ... TE Know-how ...

Get your product to market faster with a smarter, better solution.

Go to: DesignSmarterFaster.com. Your best place to get started, today!

Here you can get connected to the inner circle of TE AD&M's best thinkers. Working together early in your design review process, we can help you reach a better connectivity solution.

GET THE TE ADVANTAGE



DTS-HC SERIES CONNECTORS



HIGH-VOLTAGE DC CONTACTORS

Ideally suited for high-power interconnections in harsh environments, the connector's power contacts are rated to 300 A and are suitable for terminating conductors up to 70 mm². Based on proven military standard 38999 housings, the connectors provide the reliability and performance required for the most demanding aerospace applications.

TE delivers the switching performance demanded by aerospace and defense applications with our lightweight contactors, which offer continuous current ratings up to 500 A at 900 VDC in very compact sealed packages. Custom-designed, fully qualified main power and high-voltage distribution assemblies are also available.



Solutions for Power Distribution

- High-Power and High-Voltage Contactors
- Custom Power Distribution Panels
- High-Temperature Wire and Cables
- High-Temperature Terminations
- Power Terminations
- Power Connectors
- Heat-Shrink Tubing
- Molded Parts



CUSTOM POWER DISTRIBUTION UNITS



COPALUM TERMINALS AND SPLICES



HIGH-PERFORMANCE CONTACTS

Count on TE not only for all the pieces, but the expertise to integrate them into packages that are lighter, smaller, and easier to install. Already used on major commercial aerospace platforms, our custom PDUs consolidate multiple contactors, circuit-breakers, sensing and protective devices, and related components into modular packages.

COPALUM products are the proven way to achieve high-reliability terminations of aluminum wire or splicing between copper and aluminum wires without the need for inhibitor agents to break down oxides.

A complete range of contact styles and sizes makes it easy to mix and match signal and power in connectors. Choices include contacts designed for high-vibration and high-temperature applications. With 6 types of contacts we support standard MIL/EN3155-based terminations for both copper and aluminum wires.

FOR MORE INFORMATION

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3-1773457-8 ADM/RRD 5M 05/2013

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Consult TE for the latest dimensions and design specifications.



EVERY CONNECTION COUNTS