Wire and Cable



The industry standard for rugged, reliable performance

As one of the world's largest suppliers of passive electronic components—including connectors and interconnect systems, relays, switches, circuit protection devices, touchscreens, sensors, and wire and cable — TE Connectivity (TE) brings advanced engineering, world-class manufacturing, and innovative thinking to help your next design go from concept to production.

As we have for over 60 years in serving the aerospace, defense, and marine industries, we put a premium on innovation when helping solve tough design problems. Talking to us early in your design cycle gives you the full benefit of our expertise. We can help you to:

- Shorten the design cycle and reduce costs
- Increase reliability
- Design for manufacturability
- Meet the demanding requirements for lighter, faster, more capable systems

In short, we help you achieve a sustainable competitive advantage in some of the toughest and most severe application environments. Over 7000 engineers, 20 global design centers, and manufacturing in 20 countries are at your service for innovation and collaborative engineering.

Solutions Engineered to Your Needs

We understand the demanding and diverse needs of aerospace, defense, and marine applications from avionics to control to passenger comfort. TE has been leading the trend of moving to application-specific value-added subsystems. These engineered solutions cut your engineering time, lower manufacturing costs, and increase reliability. And you will find that our sales and application support, logistics, and global presence help you move to production.

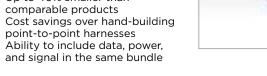
MULTICORE CABLES



Raychem Multicore Cables

Custom Cable Designs

- Available in small order quantities
- Up to 40% smaller than





Raychem Defense Standard 61-12 Part 25 Cables

- **Light Weight Marine Cables**
- Low fire hazard multicore cables Stranded tinned copper conductor, LFH insulated
- Part 18 cores
- Thin wall to reduce size
- and weight Halogen-free cable jacket
- Operating temperature range: -30°C to +105°C

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VG-95218 Marine Cables

- System compatibility
- Reduction in weight
- Significantly increased
- service life

Alternatives to Part 61-66

- Increased EMC requirements
- and diameter
- Halogen-free cables with low fire hazard

CONTROLLED IMPEDANCE CABLES



Raychem Cheminax Controlled Electrical Cables

Small Size, Light Weight

- Coax, twinax, triax, balanced line.
- data bus available

AEROSPACE, DEFENSE & MARINE / WIRE AND CABLE

- Improved electrical performance over RG cables
- 25-40% smaller and lighter than RG cables J1939-15/11 compliant cables available
- MIL-STD-1553 cables available

Empower Engineers to Solve Problems, Moving the World Forward.

AMP | AGASTAT | CII | DEUTSCH | DRI | HARTMAN | KILOVAC MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | SEACON

CONNECT WITH US

We make it easy to connect with our experts and are ready to provide all the support you need. Visit te.com/support to chat with a Product Information Specialist.

QUALITY STARTS WITH THE RIGHT APPLICATION TOOLING

Creating a quality crimp connection is essential to delivering high performance and reliability in extreme environments. From low to high volume wire processing, TE has you covered with a full range of application tooling and a global field service team.

- View all application tooling
- Connect with our experts to find the right tool for your application

te.com/wireandcable

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WIRE AND CABLE

TE Connectivity Aerospace, Defense & Marine 2900 Fulling Mill Road





WIRE AND CABLE

THE INDUSTRY STANDARD FOR RUGGED, RELIABLE PERFORMANCE

Pushing the Performance Envelope with Solutions Engineered to Your Needs



GENERAL WIRE AND CABLE

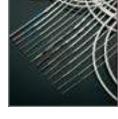


Hook-Up Wire

SPEC 44 PVDF/PE Wire and Cable

 Dual-wall construction Resistant to most solvents, fuels and lubricants

Mil Spec version available



Hook-Up Wire

SPEC 55 XL-ETFE

Wire and Cable

- Excellent abrasion and cut-through resistance
- Excellent flexibility
- Low-fluoride and Electroloss filtering options

Mil Spec version available



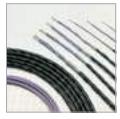
Hook-Up Wire SPEC 55 LF

Rugged

5x scrape abrasion within

Lightweight Single thin wall primary

Low Outgassing Less than 10 PPM



Electroloss Filterline Wire and Cable

SPEC 55F XL-ETFE Wire and Cable

High Performance

- Suppresses EMI above 100 MHz SPEC 55 insulation
- Rated for continuous operation -65°C to 200°C
- 600 V rating
- Light weight, small size

Mil Spec version available



Raychem Spec 80 FlexLine Wire and Cable

Flexible Light Weight Hookup Wire

- Operating temperature range:
- -65° to +200°C
- Voltage rating: 600V
- Single and dual wall constructions Conductors available in tin, silver
- and nickel coated copper
- Conductors available in
- Aluminum
- Gauge availability: 28 to 4/0 AWG



Raychem 99M and 100G Cables

- Def Stan 61-12 Part 18 Highly flame retardant
- Low smoke and toxicity
- Spec 100
- Zero halogen
- Highly flame retardant



Lightweight Marine Cables

C-Lite Cable and C-Lite

Fire-Resistant Cable

Small Size, Light Weight, Robust

- Marine approvals: DNVGL, ABS,
- BV, CCS, KR, NK and RMRS
- 30% lighter than standard
- marine cable
- Reduced diameter for easy routing
- Low-fire-hazard performance

Wire and Cable

HIGH SPEED COPPER CABLES



Raychem High Speed Copper Cables

- EMI protection
- Increased bandwidth Lightening protection
- Reduced size and weight
- Harness component system compatibility
- Ruggedized to survive in harsh environments
- Cat 5e, Cat 6a, Cat 7. 100Base-T, CANbus, IEEE 1394, USB 2.0/3.0, DVI, fiber

Raychem Cat 6a Ethernet Cable

Operating temperature range

Pending AS6070/6 qualification

· Excellent signal integrity

from -65°C to +200°C

Harness components and

connector compatibility

to tape wrapped designs

Easier to terminate compared

Raychem 100Base-T (or 100Mb)

Ethernet Quadrax Cable

Excellent signal integrity

Smaller size and weight than

Harness component system

Raychem CANbus Cable

High performance, 120Ω

Shielded and unshielded

Easier to terminate when

compared to tape-wrap designs

• Designs available to SAE J1939-11

variations available

and -15 requirements

Data Rates: 1 Mb/s

Abrasion resistant

Flexible design

twisted pair

Pending AS6070/1 qualification

Data Rates: 100 Mb/s

Ethernet Cable

at 100 Mb/s

Cat 5e cables

compatibility

at 10 Gb/s

Data Rates: 10 Gb/s Ethernet Cable



Raychem Cat 5e Ethernet Cable

Reliable 100Mb/s and 1 Gb/s **Ethernet Cable**

- Waterblock capability
- Qualified to MIL-DTL-24643 Pending AS6070/2 qualification
- Harness components and
- connector compatibility Utilization of low loss foamed dielectrics
- Tested in accordance with ANSI/TIA-568-C.2
- High temperature fluoropolymers offer temperature ranges from



Data Rates: 10 Gb/s Ethernet Cable

- Excellent signal integrity at 10 Gb/s
- Zero halogen and FDR jacket
- stranded TCC and 23 AWG solid BC conductor variations



Raychem Cat 7 Ethernet Cable

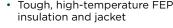
- material available
- Harness components and connector compatibility
- Available in both 24 AWG



Raychem IEEE 1394 (Firewire) Cable

Data Rates: 100 Mb/s to 3.2 Gb/s

- JSFY18 approved
- Easier routing in
- confined spaces · Smaller cable bundles for
- improved installation
- Double braid to achieve
- excellent signal integrity
- Tough, high-temperature FEP insulation and jacket







• Qualified on 100 Mb/s with future provision for 1 Gb/s

 Single pair ethernet technology reduces termination time by up to 50% over existing installation solutions

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HIGH SPEED COPPER CABLES



Ravchem DVI Cable

Data Rate: 3.96 Gb/s to 7.92 Gb/s

- Custom designs available HD video coaxial cables
- Primarily used for video displays and uni-directional data transfer



Fiber Cable

Designs Available for Harsh Military and Aerospace

- **Environments** Meets requirements of BMS 13-71
- Meets requirements of ARINC 802
- Meets requirements of Def Stan 61-12 Part 31
- TE connector compatibility Designs available for shipboard marine cable using multimode and single mode fiber



Ravchem USB 3.1 Cable

- Provides power for USB 3.1 while still providing legacy USB 2.0 support
- Double the bandwidth of USB 3.0

• Use of an extruded component and jacket reduces termination time when compared to solutions using tape wrap construction

POWER CABLES



Raychem SHF-260 Power Cable Flexible High Temperature

• Custom designs available

+200°C

• Designs available with operating

temperature range: -65°C to

Power Feeder · Operating temperature range:

- -65° to +260°C (10k hours) · Operating temperature range:
- -65° to +290°C (500 hours) Voltage rating: 1000V Tight routing bends without
- jacket wrinkling or cracking • Conductors available in nickel
- coated copper • Gauge availability: 24 to 4/0 AWG



Raychem Spec 80 FlexLine Wire and Cable

Flexible Light Weight Hookup **Wire to Power Feeders**

- Operating temperature range: -65° to +200°C
- Single and dual wall constructions Conductors available in tin,
- silver and nickel coated copper • Conductors available in
- aluminum



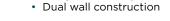
Raychem HI-FLEX Power Cable

FDR25S

- Diesel fuel resistant Tight routing bends without jacket wrinkling or cracking
- Very flexible with tight bend radius (3x static, 6x dynamic)
- Gauge availability: 16 to 4/0 AWG
- Available colors: orange, red. black • Braided jacketed cables available

ZHENS

- Zero halogen, low smoke Tight routing bends without
- jacket wrinkling or cracking • Flexible with tight bend radius (4x static, 8x dynamic)
- Gauge availability: 8 to 4/0 AWG



AEROSPACE, DEFENSE & MARINE / WIRE AND CABLE

• Voltage rating: 600V

- Gauge availability: 28 to 4/0 AWG

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AEROSPACE, DEFENSE & MARINE / WIRE AND CABLE PAGE 3 AEROSPACE, DEFENSE & MARINE / WIRE AND CABLE