

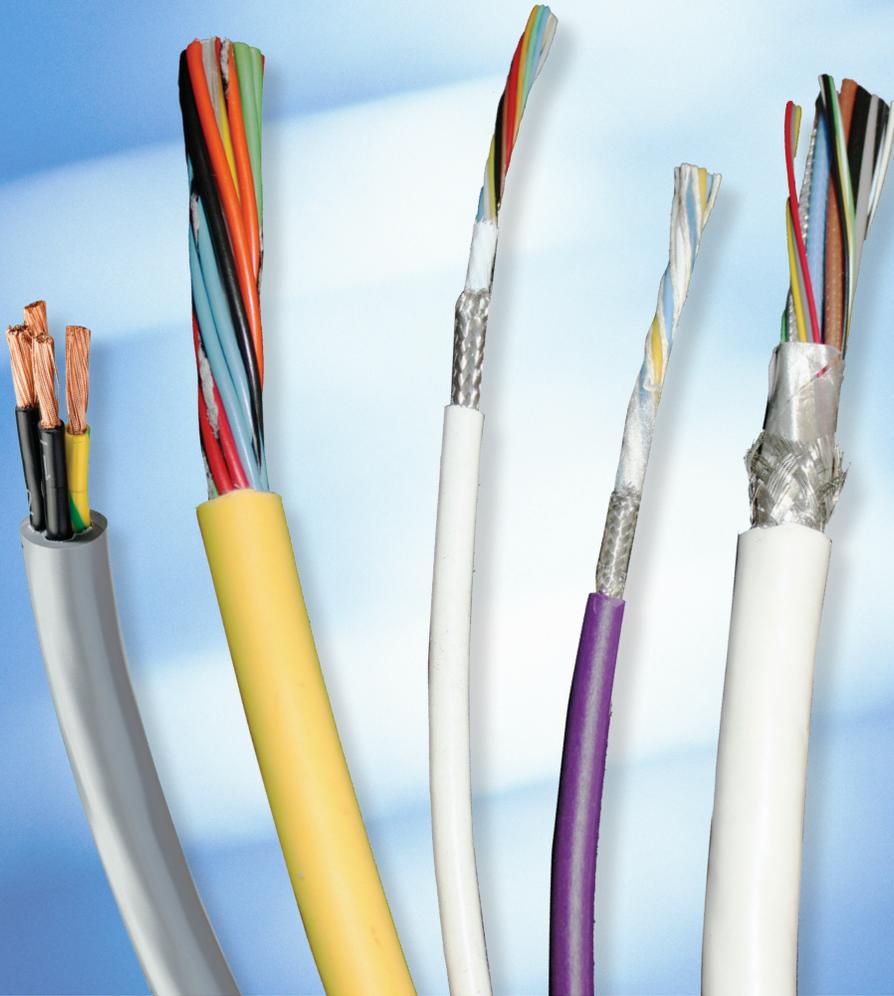
Custom Cable Brochure

Wire & Cable
Solution

we make the difference

Tel. +41 (0) 43 433 56 01 / info@wacs.ch

authorized distributor



Engineering Your Success with Custom Cables

 **AlphaWire**

Get the Market-Specific Custom Cable You Need



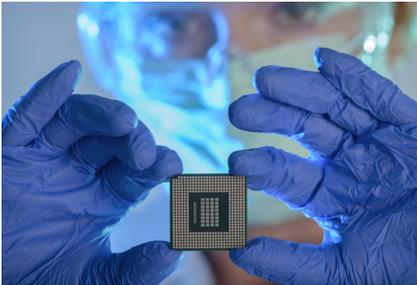
Medical

With the medical market's trends of microminiaturization and higher performance requirements, we continue to develop capabilities to provide smaller hybrid and composite cables with ultra-high flexibility, autoclavable, low noise, low-elongation, and high tensile strength.

We offer a range of ISO 10993 biocompatible and Class VI approved materials.

Medical Applications

- Imaging/radiology
 - MRI
- Minimally-invasive surgical instruments
 - Endoscopy
 - Arthroscopy
 - Laparoscopy
 - GYN
 - Orthopedic
 - Cardiac
- Patient monitoring
- Dental



Semiconductor

From wafer handling to packaging, Alpha Wire can help you make semiconductor equipment faster, more reliable, and easier to maintain. Whether refurbishing or developing new equipment, our extensive line of wire, cable, and accessories provides unrivaled performance and durability in the harshest environments. We offer low-outgassing cables.

Semiconductor Applications

- Wafer fabrication
- Lasers
- Vacuum deposition



Industrial

Our range of industrial automation cables combines the industry-leading quality and exceptional reliability you expect from Alpha Wire, with the performance to meet the rigorous requirements of the major automation communication architectures.

Industrial Applications

- Automation
- Security
- Sensing
- Robotics
- Instrumentation
- Lighting
- Power supplies
- Agriculture

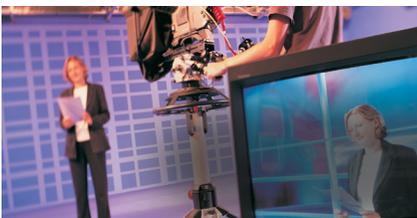


Energy

With our broad range of wire and cable for the energy industry, we can satisfy your demanding requirements in energy applications—from flex cables that can withstand the harsh environments of wind power systems to solar cable and photovoltaic wire for solar energy systems.

Energy Applications

- Power generation
 - Turbine engines
- Oil and Gas
- Solar
- Wind



Entertainment

Whether you need something as simple as a power cord or a cable that can maintain audio-video signal integrity in a noisy environment, you'll find the breadth and depth of products to ensure an optimum solution to your application.

Entertainment Applications

- Audio
- Lighting
- Video

The Right Cable... Just the Way You Want It

Turn to Alpha Wire to get the precise custom cable needed for your application. We offer you more choice in materials and configurations, sizes and shielding options, and have the ability to fulfill your request fast—with standard minimum order quantities of 500 feet.

Custom Engineered to Your Specifications and Designs

- Multiconductor cables
- Multipair cables
- Microminiature cables
- Coaxial cables
- Microcoaxial cables
- Hybrid cables
- Composite cables
- Power cables
- Lead wires
- Flat, ribbon, zip cables
- Round braids
- Retractable coil cords

Conductors: 42 AWG to 4/0 AWG

Copper

- Bare copper
- Tinned copper
- Silver-plated copper
- Nickel-plated copper
- Copper alloys

Specialty

- Magnet wire
- Tinsel wire
- Thermocouple wire

Precious Metals and Alloys

- Silver, platinum, gold
- Other exotic materials

Insulating and Jacketing Compounds

Thermoplastics

- PVC, SR-PVC
- PP
- PE
- PUR
- Nylon
- TPE
- mPPE
- Polyester
- TPV/TPR

Thermosets

- XLPE

Fluoropolymers

- FEP
- PFA
- ETFE
- PVDF

Silicones – Thermosets

- Silicone
- Flame-retardant silicone
- High-voltage silicone

Shielding

Application: Overall and individual conductors/pairs

Types: Foil, braid, spiral, Supra-Shield® foil + braid

Flexing

Flex types: Rolling, bending, torsional, continuous

Flex cycles: Up to 20 million

Ratings

Temperature: -190° to +300°C

Electrical: 30, 150, 300, 600, 1000 V

Approvals

UL, CSA, CE, IEC, RoHS, REACH

Mechanical/Environmental

- Abrasion resistance
- Oil resistance
- Chemical/solvent resistance
- Sunlight resistance
- Sterilizable
- Low outgassing

Packaging

Reeled in small or large put ups, cut to length, custom printing, custom jacket colors, 100' minimum order

Other

Can design custom cables with lumens

Manufactured Products

Value-Added Capabilities

- Coil cords
- Custom packaging
- Cut-to-length
- Dying
- Etching
 - Non-chemical
 - PTFE materials
 - Connector end for assembly
- Marking
- Spooling (UL, CSA)
- Striping
- Twisting

Quality Certifications

- ISO 9001
- ISO 13485

Intellectual Property (IP) Protection

The custom specifications provide IP protection, as each part number and specification are unique to each customer requirement. The custom specification requires customer approval with formal written consent as part of the PO acknowledgment process, and prevents any design changes or material substitutions without a new spec revision level and approval.

Custom Cable Brochure

Custom Cable Design Worksheet

Custom cable design requires detail when designing with our team of engineers. We work with you to optimize your design, giving you the best match of electrical, mechanical, and environmental properties. Below are some items to consider when determining the design of your custom cable.

Design:

Wire Size, Stranding, Plating:

Insulation:

Temperature Rating:

Voltage Rating:

No. of Conductors:

Color Code:

Filler:

Binder:

Shield:

Jacket:

Color:

Temperature Rating:

Voltage Rating:

Printing:

Overall Construction Details:

Special Requirements:

Critical Requirements:

Put-ups:

Reel:

Special Packaging:

Minimum Length:

