Communication and control are critical to any electronic system. Whether it's the monitoring and control of a wind turbine, communication between drive and motor on the factory floor, or interconnections of CAD systems in an engineering department, the proper communication and control cable is critical to maintaining high signal integrity.

The broad range of communication and control cables from Alpha Wire means you can find the right cable for your application. Our cables meet special needs, such as low-capacitance cables for extended transmission of digital signals, such as the extra flexibility of rubber insulation and jackets, or excellent shielding for electrically noisy environments.

We combine a wide range of insulation materials, shielding variations, conductor counts and gauges, as well as other options to create cables suited to any application. From traditional RS-232 connections to high-speed telemetry and data recording to high-fidelity microphone systems, our experience in materials and expertise in manufacturing means cable built to perform electrically, mechanically, and environmentally. We know that a cable is not simply a cable: it is the conduit over which your critical signals pass.

Our communication and control line includes three main categories:

- **Industrial series cable**: factory-tough cable configured for standard factory needs, such as drive interconnections, conveyors, or automation networks
- **Communication and control**: round multiconductor and multipair cable in configurations suited to nearly any application
- **Flat cable**: planar multiconductor cable used primarily inside cabinets or equipment

Get control of demanding applications
Industrial series cable

Alpha Wire’s industrial series cables are well suited to the widest range of industrial applications. We offer a range of cables for general needs such as control wiring in both stationary and moving components. We also offer application-specific configurations for use in drives, servo systems, and factory protocols.

Typical applications for Industrial cable include:
- High-flexibility applications
- Factory equipment interconnects
- Robotics
- Machine tools
- Automotive assembly equipment
- Conveyor systems
- Control panels
- Transfer shuttles
- Automated pick-and-place systems
- PLC controlled equipment
- Automated handling systems
- Cabling monitoring and position and position in servo systems

Series V VFD cable

Series V VFD cable is designed specifically for the needs of variable-frequency drives, combining the continuous dynamic stresses that cause other cables to fail. Specially formulated XLPE insulated conductors improve performance and signal integrity. Series V cable will not degrade under heavy electrical load and activity with harmonics, coronas, discharges, and power distortion. The cable’s round geometry ensures a symmetrical profile and a corresponding roundness to the foil/braid shield to deliver the low capacitance that allows longer cable runs. The cable is available with or without a brake pair.

Flat cable

The planar geometry of flat cables allows for excellent signal transmission characteristics, with low capacitance, crosstalk, and delay. For applications requiring additional protection, we also offer shielded and helixed-flat configurations for the improved crosstalk performance of twisted pairs.

Series Y VFD cable drives performance

A perfect complement to our communication, control, and industrial cables, FIT prewired flat-shielded products are made from premium compounds under the tightest manufacturing controls. This means FIT will consistently exceed optical performance standards, such as low optical distortion and low sidetone. FIT products are always in stock and come in an unprecedented variety of package sizes.

FIT” heat-shrink products

The FIT line consists of 23 different tubing types, each designed with unique attributes that offer tubing solutions for the broadest possible range of applications and environments. FIT products are always in stock and come in an unprecedented variety of package sizes.
The cables you trust. The service you deserve.

Every application is critical and wire failure is not an option when the safety of your equipment and personnel is paramount. Specify Alpha communication, control, and industrial cable for harsh environments and crucial applications; since the integrity of your system is only as robust as the products you use.

Superior availability

Alpha offers communication, control, and industrial cable from stock in most sizes and constructions, in both small and large put-ups, so you can order it when you need it. Our products are available for same-day shipment, eliminating long lead times.

Service and support, second-to-none

Selecting the correct cable for your critical application is essential to overall system reliability, performance, and safety. So we make it easy for you select the right Alpha cable for your specific application. Our online resources include a wire and cable selection guide, technical information, full product catalog, and a distributor locator to make it easy to select and get the cable you need. Can’t find what you’re looking for? Design the cable to your specification. It’s easy, just visit www.alphawire.com!