

# Alpha Wire Industrial Series Cable



# Maximum performance delivered reliably

**F**rom the factory floor to process control, the Alpha Wire Industrial Series (AWIS) cable line is 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 with drives, servo systems, and factory protocols.

AWIS cables are crafted for rugged, reliable performance in your industrial applications. They are designed to handle even your toughest applications, whether your need is continuous flexing, superior oil and chemical resistance, or excellent mechanical and electrical performance. Choose the AWIS cable with the right properties for your application:

- TC-ER, PLTC, MTW, and WTTC ratings
- Oil and chemical resistance
- UV resistance
- Direct burial
- Abrasion resistance
- EMI protection
- High flex cycling



## Typical applications for Alpha Industrial Series cable include:

- High-flexibility applications
- Factory equipment interconnects
- Robotics
- Machine tools
- Automotive assembly equipment
- Conveyor systems
- Control panels
- Transfer shuttles
- Solar farms
- Automated pick-and-place systems
- PLC controlled equipment
- Automated handling systems
- Control/monitoring of speed and position in servo systems



## Series F Continuous Flex Control Cables

Rated for up to 20 million rolling flex cycles

Alpha Wire's Series F continuous flex control cable offers industry-leading mechanical and electrical performance for high-flex cable track applications. Designed for a variety of flexing styles, they have been tested to exceed over 20 million rolling flex cycles, making them ideal for both single-axis and multi-axis motion control and robotic applications where continuous flexing is required.

UL TC-ER	UL PLTC
UL TFFN/THHN	UL Oil Res. I/II
UL Sunlight Resistant	CSA CIC
CSA AWM I/II A/B FT4	CSA TC

Up to 65 conductors  
18 to 8 AWG | 600 V  
-25°C to +90°C (static)  
-5°C to +90°C (dynamic)



### Series V VFD Cables

**Double shielded for superior EMI performance**

Series V cables for variable-frequency drives (VFD) set the standard in high-performance and reliable connectivity. Their specially formulated cross-linked polyethylene insulation provides superior corona resistance, low capacitance for longer runs, and excellent low-temperature properties.

UL TC-ER  
UL RHW-2/XHHW-2  
UL 1000 V Flexible Motor Supply  
UL Oil Res. I  
UL Sunlight Resistant  
UL Direct Burial  
CSA AWM I/II A/B FT4

3 or 4 conductors  
Optional brake pair  
16 to 4/0 AWG  
600/1000 V  
-40°C to +90°C



### Series XM Flexible Control Cable

**Tough PVC cable for continuous flex control applications**

Featuring a specially formulated, premium-grade PVC jacket and fine stranding, Series XM flexible control cable is the ideal choice for medium- to high-flex applications. Series XM offers a durable, oil-resistant construction that prevents contamination from hazardous fluids and protects against abrasion, and is available in a shielded version to provide EMI protection.

UL TC-ER  
UL WTTTC  
UL Sunlight Resistant  
CSA AWM I/II A/B FT4

UL MTW  
UL Oil Res. I

Up to 65 conductors  
18 to 8 AWG | 600/1000 V  
-30°C to +90°C (static)  
-5°C to +90°C (dynamic)



### Series SF Flexible Servo Cable

**Maximum flexibility in servo control and power**

Series SF power servo cables bring a new level of flexibility to the integration and monitoring of servo drives. Designed specifically for connecting power between the supply and servo motors, drives, and controllers, Series SF cables feature a flexible TPE jacket and PVC/nylon insulation, making them suitable for flexing applications that require continuous movement.

UL TC-ER  
UL Oil Res. I/II  
CSA AWM I/II A/B FT4

UL WTTTC  
UL Sunlight Resistant

4 power conductors or  
4 power + 2 pairs for control

18 to 8 AWG | 600/1000 V  
-25°C to +90°C



### Series M Control Cable

**Excellent mechanical and electrical performance for stationary cable trays**

Series M cable meets the needs for stationary cable trays and minimal flexing applications and where superior resistance to oils and chemicals is mandatory. They provide exceptional performance in static applications, with a tough PVC/PVC-nylon jacket insulation and resistance to oils and chemicals.

UL TC-ER  
UL MTW  
UL Oil Res. I  
UL Sunlight Resistant  
CSA AWM I/II A/B FT4

UL PLTC  
UL WTTTC  
UL Direct Burial

Up to 65 conductors  
18 to 8 AWG | 600 V  
-25°C to +90°C (static)  
-5°C to +90°C (dynamic)



### Series P Enhanced Stationary Control Cable

**Superior oil and chemical resistance**

Series P cables combine the exceptional oil and chemical resistance of Series M cable with a specially formulated thermoplastic elastomer jacket for additional flexibility—making it easier to install and route the cable in tight spaces. Series P cable can be used in flex applications where travel distances and flexing speeds are low.

UL TC-ER  
UL MTW  
UL Oil Res. I/II  
UL Sunlight Resistant  
CSA AWM I/II A/B FT4

UL PLTC  
UL TFFN/THHN

Up to 65 conductors  
18 to 8 AWG | 600 V  
-25°C to +90°C



### Series V-Flex VFD Cable

Series V-Flex cables combine excellent flexibility with ruggedness to withstand almost any industrial environment. Foil/braid shielding prevents signal interference, while the premium TPE jacket withstands corroding solvents and other industrial hazards.

UL TC-ER  
UL Sunlight Resistant  
UL Oil Res I/II  
UL XHHW-2/RHW-2  
UL 1000 Volt Flexible Motor Supply Cable  
CSA FT4 Vertical Tray  
CSA CIC  
CSA TC  
CSA -40°C Cold Bend

4 conductors  
16 to 4 AWG  
600/1000 V  
-40°C to +90°C

## The cables you trust. The service you deserve.

Every application is critical and cable failure is not an option when the performance of your equipment and the safety of your personnel are paramount. Specify Alpha Industrial Series cables for your demanding applications, since the integrity of your system is only as robust as the products you use.

## Superior availability

Alpha offers cables 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 unique 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](http://www.alphawire.com)!

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**AlphaWire**

*Cables you trust. Service you deserve.*