Cable Solutions for Optimal Material Handling

Lowering costs and increasing productivity

Continuous uptime requires reliable, high-performance material handling equipment to maintain efficient production. Modern material handling systems are flexible, intelligent, and capable of combining speed with efficiency.

The right cable can affect the reliability and uptime of material handling systems by ensuring robust connectivity and maximum signal integrity. Our wire, cable, and tubing solutions help you solve the tough problems of EMI control, protection from abrasion, oil, and chemicals, and the ability to withstand the stresses of continuous flexing. Alpha Wire products elevate production from ordinary to high performance.

Alpha offers cable from stock in most sizes and constructions, in a variety of packaging options, so you can order it when you need it and how you need it. Our products are available for same-day shipment to practically anywhere in the world, eliminating long lead times.

Industries
- Apparel and Textiles
- Automotive
- Food and Beverage
- Medical/Pharmaceutical
- Mining
- Paper and Pulp
- Semiconductor Processing
- Warehouse and Distribution Centers

Typical Equipment
- Automated CNC Tool Handlers
- Automated Guided Vehicle Equipment
- Automated Sorting Systems
- Automated Storage and Retrieval
- Automated Wafer Handling
- Bulk Conveying (Mining)
- Conveyor Systems
- Robotic/Gantry Palletizers
Wire and cable ideal for material handling

Series V VFD Cables
- Designed for extended duty cycles
- Symmetrical design for uniform electrical characteristics
- Low capacitance for improved signal transmission over longer distances
- 4-conductor versions with or without brake pair
- 3-conductor versions with reduced diameter and increased flexibility for easier routing and handling

Series SF Flexible Servo Cables
- Multi-axis control
- Resolver and encoder feedback
- Dynamic braking
- High-flex applications

Series V-Flex VFD Cable
- Extra flexibility
- Tough TPE jacket for protection against oil, solvents, and other hazards
- Symmetrical design for uniform electrical characteristics
- Low capacitance for improved signal transmission over longer distances
- Rated for use at temperatures as low as -40°C
- 4-conductor versions

Automation Cables
- ControlNet™, DeviceNet™, Fieldbus A/B, High-Speed Fieldbus, Industrial Twinax, PROFIBUS®-DP, RS-485
- High-speed connectivity solutions
- Plug and play modularity
- High-level signal integrity

Xtra-Guard® Flex Series
- Long cycle life for high-speed flexing
- Supports pick-and-place robotics
- Multiple sizes and conductor counts
- Outstanding EMI protection

Series M, F, P Control Cables
- Complete range of control applications
- Series F for flexibility: up to 20 million continuous rolling flex cycles
- Series M for robust control
- Series P for enhanced flexibility and routability

Series XM Control Cables
- Continuous flexibility in an affordable, specially formulated PVC jacket
- Oil and chemical resistant
- Tray-rated applications

Additional product categories available to support your material handling needs

FIT® Heat-Shrink Tubing
- General-purpose polyolefin with 2:1 shrink ratio
- High shrink ratios up to 6:1
- Dual-wall (meltable inner wall, mastic, and adhesive lined)
- Special application (PVDF, FEP/PTFE, flexible, fabric)
- R&D kits available

FIT Wire Management
- Harnessing, routing, shielding
- Rigid and flexible tubing
- Sleevings
- Shielding/grounding

Hook-Up Wire
- PVC, XL-PVC, PTFE, Silicone, XLPE, PVDF, ETFE, TGGT, MG, MPPE
- UL/CSA, Mil Spec, wire wrap, ribbon, bus bar
- Stranded, solid, coated, special platings
- From 100’ spools to large put-ups

Xtra-Guard Industrial Ethernet Cable
- Cat 5e two- and four-pair cable
- Abrasion-resistant TPE jacket resists oil, solvents, and other hazards
- 3x the low temp flexibility of ordinary PVC
- -50°C up to 125°C
- Special configurations available, such as power + data
- CMR Riser rated

Custom Cable
- Cable Design Center® on AlphaWire.com
- Short lead times and low minimums
- Quickly and easily modify any standard Alpha cable specification
- Get the best match of electrical, mechanical, and environmental performance

Service and support, second-to-none
We make it easy for you to select the right cable for your specific material handling equipment application. Our online resources include a wire and cable selection guide, technical information, full product catalog, and a distributor locator. You can even design cable to your specification. It’s easy—just visit www.alphawire.com!