## Alpha Wire INDUSTRIAL SERIES TECHNOLOGICALLY ADVANCED CABLE SYSTEMS FOR AUTOMOTIVE AND INDUSTRIAL FACTORY AUTOMATION

Alpha Wire continues to offer "Powerful Solutions For Critical Applications" with the introduction of our new **Alpha Wire INDUSTRIAL** SERIES product line.

The Alpha Wire INDUSTRIAL SERIES offers technologically advanced cable systems for automotive and industrial factory automation. There is an Alpha Wire INDUSTRIAL SERIES cable product available to solve most existing critical and severe-duty application requirements.

When it has to be right, when dependability and quality are paramount, when safety and security are the primary issue, the UL Exposed Run (-ER) Compliant Alpha Wire INDUSTRIAL SERIES provides the total solution and sets the industry standard for performance, quality and reliability.

Specify **Alpha Wire INDUSTRIAL** SERIES: **SERIES F**, **SERIES M**, **SERIES L**, **SERIES P**, **SERIES S** and **SERIES V** for compliance with the 2005 National Electrical Code for cables installed in industrial establishments.

All **Alpha Wire INDUSTRIAL** SERIES products are designed and manufactured in the United States by Alpha's exacting team of engineers. If you don't find the cable you require in this catalog, we'll work with you to design what you need.

### **Applications**

- High Flexibility/High Bend Applications
- Factory Equipment Interconnects
- Robotics
- Machine Tools
- Automotive Assembly Equipment
- Conveyor Systems
- Control Panels
- Flex and Static Track
- Transfer Shuttles
- Automated Pick-and-Place Systems
- PLC Controlled Equipment
- C-Track or Stationary Applications
- Automated Handling Systems
- Regulation and Measurement of Motor Speeds and Positions For Use in Servo Motor Systems







101

Manufactured In The U.S.A.



**UL TYPE TC-ER 600 VOLT UL TYPE PLTC OPEN WIRING 300 VOLT DIRECT BURIAL, SUNLIGHT RESISTANT RoHS COMPLIANT, UL STANDARD 66 TYPE TFFN** CSA AWM I/II A/B: 600 VOLT FT-4

# Alpha Wire INDUSTRIAL SERIES

STATIONARY AUTOMOTIVE CONTROL CABLE

CE - LVD 73/68/EEC, AMEND. 93/68/EEC MINIMAL FLEX, OIL/CHEMICAL RESISTANT, MULTICONDUCTOR, UNSHIELDED

# HIGH PERFORMANCE, STATIONARY AUTOMOTIVE CONTROL CABLE

THE ULTIMATE CABLE SOLUTION FOR STATIONARY/CABLE TRAY AND SOME MINIMAL FLEXING APPLICATIONS WITH SUPERIOR RESISTANCE TO OILS AND CHEMICALS

#### **CHOOSE SERIES M FOR:**

- Cables Extending From Cable Tray For An Unlimited Distance UL Type PLTC or UL Type TC
- Improved Cable Life Abrasion Resistance
  - Jacket Durability
- Reduced Cable Cost Oil Resistance

#### **SERIES M Applications:**

- UL Compliant to NEC Section 725.61 (D) (4) and NEC Section 336.10 (7) For Extended Runs Exiting The Cable Tray
- Factory Equipment Interconnects
- Stationary Track/Tray
- Automotive Assembly Equipment
- Robotics
- Machine Tools

#### **AVAILABILITY**

- ▲ In Stock: Bulk, Cut to Length
- 16 (Black Conductors Only) Čables are Made To Order, 1,000 Ft. Minimum, Non-Cancelable, Non-Returnable
- 18, 14, 12, 10 and 8 AWG Cables Are Made To Order. 1,000 Ft. Minimum, Non-Cancelable, Non-Returnable. Call Alpha for details.

# RED INSULATION – AC Circuits Operating at Less Than Line Voltage BLUE INSULATION – DC Circuits Operating at Less Than Line Voltage BLACK INSULATION – AC Circuits Operating at Less Than Line Voltage



#### **CHARACTERISTICS**

#### **OPERATING TEMPERATURE:**

—25°C to 90°C (75°C Wet)

#### **VOLTAGE RATING:**

600 Volt

#### **COLOR DESCRIPTION:**

- Color Code: Red (RW), Blue (LW) or Black (KW) Alpha-Numeric Conductors White Striped Neutral (>12 Conductors) Green/Yellow Ground Conductor
- Jacket Color: Gray

#### **PRODUCT DESCRIPTION:**

- Conductor: Class K Stranded Bare Copper
- Insulation: Red, Blue or Black PVC/Nylon
- Jacket: Specially Formulated Oil Resistant PVC

#### SPECIFICATIONS

- UL Standard 66, Type TFFN PVC/Nylon Conductors
  UL Standard 1277, Type TC-ER, 90°C, 600 Volt
- UL Standard 13, Type PLTC, 90°C, 300 Volt - UL Sunlight Resistant
- UL Open Wiring
- UL Direct Burial
- CSA C22.2 No. 210.2 AWM I/II A/B 90°C, 600 Volt, FT-4
- CE Low Voltage Directive: 73/68/EEC - Amendment 93/68/EEC
- RoHS Compliant

#### **FIT**® TUBING RECOMMENDATION

- FIT: 221 General Purpose, Irradiated Polyolefin (See Pages 114,115 for Product Specifications)
- FIT -321 Medium Wall, Adhesive Lined, Irradiated Polyolefin (See Page 121 for Product Specifications)

16 AWG (1,32mm²), 26/30 BC, Insulation Thickness 0.016" PVC (0,4mm)/0.005" Nylon (0,1mm)									
Red Conductors	Blue Conductors	Black Conductors	No. of	Primary	O.D.	Jacket Th	ickness	Nominal	Diameter
Alpha Part No.	Alpha Part No.	Alpha Part No.	Cond.	Inches	mm	Inches	mm	Inches	mm
▲M16103RW	AM16103LW	M16103KW	3	0.102	2,6	0.050	1,3	0.325	8,3
▲M16104RW	AM16104LW	M16104KW	4	0.102	2,6	0.050	1,3	0.350	8,9
AM16105RW	AM16105LW	M16105KW	5	0.102	2,6	0.050	1,3	0.380	9,7
AM16107RW	AM16107LW	M16107KW	7	0.102	2,6	0.050	1,3	0.410	10,4
AM16112RW	AM16112LW	M16112KW	12	0.102	2,6	0.065	1,7	0.575	14,6
AM16117RW	AM16117LW	M16117KW	17	0.102	2,6	0.065	1,7	0.645	16,4
AM16119RW	AM16119LW	M16119KW	19	0.102	2,6	0.065	1,7	0.644	16,3
AM16122RW	AM16122LW	M16122KW	22	0.102	2,6	0.065	1,7	0.705	17,9
AM16125RW	AM16125LW	M16125KW	25	0.102	2,6	0.065	1,7	0.760	19,3
AM16133RW	AM16133LW	M16133KW	33		2,6	0.085	2,2	0.855	21,7
AM16142RW M16149RW	AM16142LW AM16149LW	M16142KW M16149KW	42 49	0.102	2,6 2,6	0.085 0.085	2,2 2,2	0.950	24,1 25,5
AM16165RW	AM16165LW	M16165KW	65	0.102	2,6	0.085	2,2	1.120	28,4

FOR COMPLETE SERIES F PRODUCT PERFORMANCE DATA, SEE PAGE 367.







Certified









Conveyor Systems Control Panels