### 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.





Manufactured In The U.S.A.

#### **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





## SERVO POWER CABLE/COMPOSITE SERVO POWER CABLE

OIL RESISTANT, FLEXIBLE MULTICONDUCTOR, SHIELDED

**UL STANDARD 758, RoHS COMPLIANT, AWM STYLES 1015 & 20626** CSA C22.2 NO. 210.2 -

AWM I/II A/B, 90°C, 600 VOLT, FT-1 CE LVD: 73/68/EEC, AMEND. 93/68/EEC



### Servo Power Cable, **COMPOSITE SERVO** POWER CABLE

DESIGNED FOR USE IN HIGH-FLEX, AUTOMATED SERVO SYSTEMS FOR SERVO SIGNAL FEEDBACK **AND SERVO POWER** 

#### CHOOSE SERIES S SERVO AND **COMPOSITE CABLES FOR:**

- Power Supply for Connecting Servo System Motors to Drives, Controllers, and Power Supplies (Servo)
- Power Supply and Data Cables for Connecting Servo System Motors, and Electro-mechanical Devices to Drives, Controllers and Power Supplies (Composite)
- For Temperature Feedback and Braking Control, Two Individually Shielded Pairs\* are Added to the 3 Power and One Grounding Conductor (Composite)

#### **SERIES S SERVO POWER, CONTROL CABLE AND** FEEDBACK CABLE APPLICATIONS:

- Machine Tools
- Automated Pick-And-Place Systems
- Robots
- C-Track or Stationary **Applications**
- Automotive Assembly Systems
- Automated Handling Systems

#### **FIT**® TUBING RECOMMENDATION

**FIT**®-**600** − Highly Flexible, Irradiated Elastomer (See Page 131 for Product Specifications)

FIT®-650 — Chemical and Temperature Resistant Irradiated Viton® (See Page 132 for Product Specifications)

#### **CHARACTERISTICS**

#### **OPERATING TEMPERATURE:**

■ 5°C to 90°C

#### **VOLTAGE RATING:**

600 Volt

#### **COLOR DESCRIPTION:**

- Conductors: Black With White, Alternate & Inverted, Alpha-Numeric Characters, No. 1, No. 2, No. 3 and Green/Yellow Grounding Conductor Pairs: Black With White, Alternate & Inverted, Alpha-Numeric Characters, No. 5, No. 6, No. 7, No. 8, No. 5 & 6 Are Paired, No. 7 & 8 Are Paired
- Jacket Color: Orange

#### PRODUCT DESCRIPTION:

- Conductor: Tinned Copper
- Insulation: PVC
- Cable Shield: Overall Foil/Braid (85%)
- Pair Shields: See Tabular Data Below
- Jacket: Specially Formulated Thermoplastic Elastomer

#### **SPECIFICATIONS**

- UL Standard 758, AWM Styles 1015 & 20626
- CSA C22.2 No. 210.2 AWM I/II A/B 90°C, 600 Volt, FT-1
- CE Low Voltage Directive 73/68/EÉC Amendment 93/68/EEC
- RoHS Compliant









#### AVAILABILITY

■ In Stock: 100 ft (30,5m), 500 ft (152m) and 1000 ft (305m) put-ups

#### SERIES S – SERVO POWER CABLE, OVERALL FOIL/BRAID (85%) SHIELD

Alpha Part No.	No. of Cond.	Conductor		Jack Thick		Nominal Diameter	
		AWG	Strand	Inches	mm	Inches	mm
S61124CY	4	24	7/32	0.048	1.2	0.350	8.9
S61122CY	4	22	7/30	0.048	1.2	0.365	9.3
S61120CY	4	20	10/30	0.048	1.2	0.379	9.6
561118CY	4	18	19/30	0.053	1,3	0.426	10,8
561116CY	4	16	26/30	0.053	1.3	0.446	11.3
S61114CY	4	14	41/30	0.053	1.3	0.484	12.3
S61112CY	4	12	65/30	0.060	1,5	0.552	14,0
561110CY	4	10	105/30	0.065	1.7	0.616	15.6
S61108CY	4	8	133/29	0.075	1.9	0.857	21.8

#### SERIES S – COMPOSITE SERVO POWER CABLE, OVERALL FOIL/BRAID (85%) SHIELD

Alpha	Power Conductor No. of		Brake Pairs No. of			Jacket Thickness		Nominal Diameter		
Part No.	Cond.	AWG	Strand	Pairs	AWG	Strand	Inches	mm	Inches	mm
\$61220CY* \$61221CY* \$61222CY* \$61223CY* \$61224CY**	3+ Ground 3+ Ground 3+ Ground 3+ Ground	16 14 12 10 8	26/30 41/30 65/30 105/30 133/29	2 2 2 2 2	18 18 16 16 16	41/34 41/34 65/34 65/34 65/34	0.053 0.053 0.060 0.065 0.075	1,3 1,3 1,5 1,7 1,9	0.625 0.640 0.775 0.810 0.930	15,9 16,3 19,7 20,6 23,6

Viton® is a registered trademark of DuPont Dow Elastomers



\*Brake Pairs are Individually Foil/Braid (85%) Shielded, with Drain Wires. \*\*S61224CY Brake Pairs are Overall Foil/Braid (85%) Shielded, with Drain Wire.