

UL TYPE TC-ER 600 VOLT  
 DIRECT BURIAL, SUNLIGHT RESISTANT  
 RoHS COMPLIANT, UL 1000 VOLT  
 FLEXIBLE MOTOR SUPPLY CABLE  
 UL TYPE XHHW-2, RHW-2 (2-14 AWG)  
 CSA AWM I/II A/B FT-4  
 CE-LVD, 73/68/EEC AMEND. 93/68/EEC

# Alpha Wire **INDUSTRIAL** SERIES

## ENHANCED DESIGN, HIGH PERFORMANCE SMALL DIAMETER VARIABLE FREQUENCY DRIVE (VFD) CABLE

### SERIES **M** ENHANCED DESIGN, HIGH PERFORMANCE, SMALL DIAMETER VARIABLE FREQUENCY DRIVE (VFD) CABLE

THE ULTIMATE SMALL DIAMETER VARIABLE FREQUENCY DRIVE CABLE CONNECTION SOLUTION

### CHOOSE SERIES V ENHANCED DESIGN SMALL DIAMETER VARIABLE FREQUENCY DRIVE CABLES FOR:

- Interconnection of Variable Frequency Drive Systems and Motors For Extended Duty Cycle Performance Requirements
- Low Capacitance for Improved Signal Transmission
- Elimination of Downtime from Cable Failure
- Oil Resistance
- Improved Cable Life
- Longer Cable Runs

### SERIES V ENHANCED DESIGN SMALL DIAMETER VARIABLE FREQUENCY DRIVE CABLE APPLICATIONS:

- UL Exposed Run (-ER) Compliant to NEC Section 725.61 (D) (4) and NEC Section 336.10 (7)
- Multi-Axis Control Systems
- Automotive Assembly Equipment
- Factory Equipment Interconnects
- Robotics
- Machine Tools
- Stationary Track/Tray
- Conveyor Systems
- Control Panels

### AVAILABILITY

- In Stock: Bulk, Cut to Length

### FIT® TUBING RECOMMENDATION

**FIT-221** – General Purpose Irradiated Polyolefin (See Pages 114,115 for Product Specifications)

**FIT-321V** – Low Shrink Temp., Flame Retardant, Irradiated Polyolefin (See Page 120 for Product Specifications)

### SERIES V – VARIABLE FREQUENCY DRIVE CABLE WITHOUT BRAKE PAIR

Alpha Part No.	No. of Cond.	Conductor		Drain Wire Equiv. AWG Size [Physical Drains - AWG - (Strand)]	Nominal Diameter Inches	mm	Capacitance (Est.)		Continuous Current Per Conductor, Max. @30C (NEC)	Bend Radius	
		AWG	Strand				To Conductor, pF/Ft	To Shield, pF/Ft		Inches	mm
V16016	4	16	26/30	16 [1-16 (26/30)]	0.535	13,6	21	38	12	4.3	34
V16014	4	14	41/30	14 [1-14 (41/30)]	0.575	14,6	23	42	25	4.6	37
V16012	4	12	65/30	12 [1-12 (65/30)]	0.627	15,9	26	47	30	5.0	40
V16010	4	10	105/30	10 [1-10 (105/30)]	0.728	18,5	29	53	40	5.8	47
V16008	4	8	7x19/29	8 [4 No. 14 (41/30)]	0.920	23,4	30	54	55	7.4	59
V16006	4	6	7x19/27	6 [4 No. 12 (65/30)]	1.017	25,8	33	60	75	8.1	65
V16004	4	4	7x19/25	4 [4 No. 10 (105/30)]	1.157	29,4	37	67	95	9.3	74
V16002	4	2	7x19/23	2 [4 No. 8 (133/30)]	1.317	33,5	40	72	130	10.5	84

### SERIES V – VARIABLE FREQUENCY DRIVE CABLE WITH BRAKE PAIR

Alpha Part No.	No. of Cond.	No. of Pairs	Conductor		Brake Pair		Drain Wire Equiv. AWG Size [Physical Drains - AWG - (Strand)]	Nominal Diameter Inches	mm	Capacitance (Est.)		Continuous Current Per Conductor, Max. @30C (NEC)	Bend Radius	
			AWG	Strand	AWG	Strand				To Conductor pF/Ft	To Shield, pF/Ft		Inches	mm
V16116	4	1	16	26/30	14	7/22	16 [1-16 (26/30)]	0.710	18,0	21	38	8	5.7	45
V16114	4	1	14	41/30	14	7/22	14 [1-14 (41/30)]	0.740	18,8	23	42	20	5.9	47
V16112	4	1	12	65/30	14	7/22	12 [1-12 (65/30)]	0.780	19,8	26	47	30	6.2	50
V16110	4	1	10	105/30	14	7/22	10 [1-10 (105/30)]	0.880	22,4	29	53	40	7.0	56
V16108	4	1	8	7x19/29	14	7/22	8 [4 No. 14 (41/30)]	1.030	26,2	30	54	55	8.2	66



### CHARACTERISTICS

#### OPERATING TEMPERATURE:

- -25°C to 90°C (UL: Wet or Dry)

#### VOLTAGE RATING:

- UL Listed Type TC 600 Volt
- UL 1000 Volt Flexible Motor Supply Cable

#### COLOR DESCRIPTION:

- Color Code: Conductors 1, 2, and 3: Black Insulation with Alpha Numeric Printing (Example: 1 - One) Conductor 4: Green/Yellow for Ground (IEC Standard)
- Brake Pair Color Code: Black and White without Numeric Print
- Jacket Color: Black

#### PRODUCT DESCRIPTION:

- Conductor: Stranded Tinned Copper
- Insulation: XLPE (Cross-Linked Polyethylene)
- Drain Wire: Stranded Tinned Copper
- Shield: Aluminum/Polyester/Aluminum, Drain Wires, Plus Overall Tinned Copper Braid 85%. Four Symmetrical Drain Wires on 8, 6, 4 and 2 AWG Cable
- Jacket: Specially-Formulated, Oil Resistant PVC

### SPECIFICATIONS

- UL Standard 1277, Type TC-ER, 90°C, 600 Volt
- CE-LVD: 73/68/EEC Amend. 93/68/EEC
- UL Exposed Run (-ER)
- UL Direct Burial
- UL Sunlight Resistant
- UL Type XHHW-2, RHW-2 (2-14 AWG Only)
- UL 1581 Vertical Tray
- UL 1000 Volt Flexible Motor Supply Cable
- UL FT-4 Vertical Tray
- CSA AWM I/II A/B XHHW-2 RHW-2 Singles
- RoHS Compliant

