Alpha Wire Company

SERIES V **LARGE AWG VFD CABLES**

alpha

INTRODUCING...

SERIES V

LARGE AWG VFD CABLES

NOW IN SIZES FROM 1 AWG TO 4/0

The Alpha Wire SERIES V Enhanced Design VFD cable family has been expanded to include five new conductor sizes; 1 AWG, 1/0, 2/0, 3/0, and 4/0. These cables retain the specially formulated cross-linked polyethylene (XLPE) insulation which provides superior corona resistance, low capacitance as well as excellent low temperature properties.

These new large AWG VFD cables also feature a symmetrical design with the bare copper ground wires placed in the interstices of the conductors. This results in uniform conductor to ground capacitance and impedance. The benefit of this arrangement is that it minimizes the probability of motor damage from common mode current flow. An additional feature is the dual layer copper tape shield that provides 100% shielding with low shield impedance.

Alpha Wire large AWG VFD cables conform to numerous industry standards; MSHA, UL 1000V Flexible Motor Supply Cable, UL Type TC-ER, UL Direct Burial, UL Type XHHW-2, CSA AWM I/II A/B FT-4, IEEE 1202 /383 Flame Tests, CE, and EU RoHS. Additionally, these cables are suitable in Class I & II: Division 2 hazardous locations where the round outer jacket helps ensure a good seal with glands and grommets where IP67 requirements must be met.

UL LISTED Certified Canadian Standards Association CE

Suitable for Direct Burial RoHS Compliant

SERIES V

**High Performance
Symmetrical Design
3 Conductor—Variable
Frequency Drive (VFD) Cable**

**UL TYPE TC-ER 600 VOLT
DIRECT BURIAL
UL 1000 VOLT FLEXIBLE MOTOR SUPPLY CABLE
UL TYPE XHHW-2
CSA AWM I/II A/B FT-4
MSHA**

THE ULTIMATE VARIABLE FREQUENCY DRIVE CABLE CONNECTION SOLUTION

CHOOSE SERIES V SYMMETRICAL DESIGN 3 CONDUCTOR 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 SYMMETRICAL DESIGN 3 CONDUCTOR VARIABLE FREQUENCY DRIVE CABLE APPLICATIONS:

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

AVAILABILITY:

- In Stock: Bulk, Cut to Length
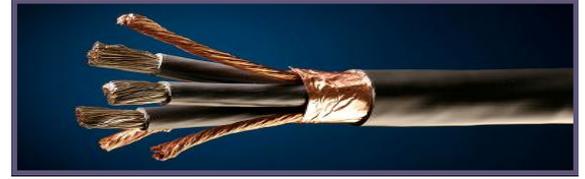
CHARACTERISTICS

OPERATING TEMPERATURE:

- –40°C to 90°C (UL: Wet or Dry)

VOLTAGE RATING:

- UL Listed Type TC-ER 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)
- Jacket Color: Black

PRODUCT DESCRIPTION:

- Conductor: Stranded Tinned Copper
- Insulation: XLPE (Cross-Linked Polyethylene)
- Ground Wire: Stranded Bare Copper
- Shield: Dual Spiral Copper Tapes

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
- UL 1581 Vertical Tray
- UL 1000 Volt Flexible Motor Supply Cable
- CSA FT-4 Vertical Tray
- CSA AWM I/II A/B XHHW-2 Singles
- IEEE 1202/383 Vertical Tray
- MSHA

Visit: www.alphawire.com for more information!

UL LISTED · CSP Certified Canadian Standards Association · CE · Suitable for Direct Burial · RoHS Compliant

Alpha Part No.	AWG	Conductor Stranding	Nominal Diameter Inches	mm	Min Bend Radius Inches	mm	Maximum Current*
V16001	1	(133(7x19)/22)	1.197	30,48	12.0	304,8	150
V16000	1/0	(133(7x19)/21)	1.294	32,77	12.9	327,7	170
V16020	2/0	(133(7x19)/20)	1.399	35,56	14.0	355,6	195
V16030	3/0	(133(7x19)/19)	1.517	38,53	15.2	386,1	225
V16040	4/0	(133(7x19)/18)	1.653	41,98	16.5	419,1	260

alpha