

CVTC® VFD - Flexible Motor Supply Cable

XLPE/PVC, Low-Voltage Power, Al/Polyester/Al TC Braid Shielded, 1000 V UL Flexible Motor Supply and WTTC, 600 V UL Type TC-ER—Method 4 Color Code w/Green/Yellow Ground and Signal Pair

Product Construction:

Conductor:

- 16 AWG to 10 AWG tinned copper per ASTM B33
- Class K stranding per ASTM B172

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE) 90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

Ground:

- One full-sized green/yellow insulated ground, same AWG size as circuit conductors

Metallic Shield:

- Overall aluminum/polyester/aluminum shield with 25% minimum overlap in conjunction with overall tinned copper braid with 85% coverage and full-sized tinned copper drain wire(s)

Signal Pair for Brake:

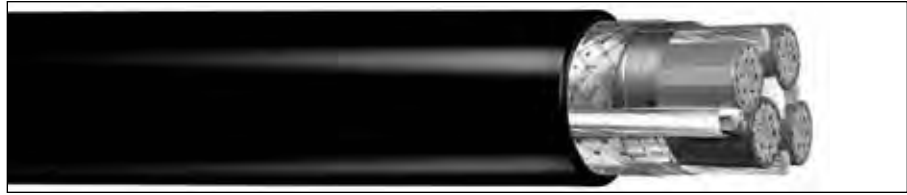
- One 16 AWG (26 x 30) tinned copper signal pair with an overall aluminum foil shield and 18 AWG drain wire
- Black/White color code

Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC), black

Options:

- Colored jackets available upon request
- 2000 V rated designs



Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 1000 V
- In free air, raceways or direct burial
- For use in aerial, conduit, open tray and underground duct/installations
- Permitted for use in Class I, Div. 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:

- Rated at 90°C wet or dry
- Combination foil/braid shield provides maximum shield coverage required for Variable Frequency Drive (VFD) applications
- Meets cold bend test at -25°C
- TC-ER listing meets crush and impact requirements for Type MC cables
- Abrasion- and chemical-resistant
- Stable electrical properties over a broad temperature range
- UV/sunlight-resistant
- Flexible strand conductors for all sizes to allow for ease of installation and long-term performance in light duty flexing applications

Compliances:

Industry Compliances:

- UL 2277 1000 V Flexible Motor Supply Cable and 1000 V Wind Turbine Tray Cable
- UL 1277 600 V Type TC-ER UL File # E57179
- UL 44 Type RHH or RHW-2 conductors
- ICEA S-95-658/NEMA WC70
- CSA C22.2 No. 210 1000 V AWM I/II A/B FT4 SR

Flame Test Compliances:

- UL 1581 VW-1
- IEEE 1202/CSA FT4
- UL 1685

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	INSULATED GROUND WIRE SIZE (AWG)	DRAIN WIRE SIZE (AWG)	SIGNAL PAIR (AWG)	NOMINAL CONDUCTOR DIAMETER		MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		NET WEIGHT	
							INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km

16 AWG - 10 AWG CONDUCTORS

438150*	3	16	26W	16	16	16	0.057	1.40	0.045	1.14	0.060	1.52	0.750	19.05	324	482
438160*	3	14	41W	14	14	16	0.071	1.80	0.045	1.14	0.060	1.52	0.823	20.90	340	506
438170*	3	12	65W	12	12	16	0.088	2.20	0.045	1.14	0.080	2.03	0.909	23.09	438	652
438180*	3	10	105W	10	10	16	0.112	2.80	0.045	1.14	0.080	2.03	0.997	25.32	563	838

Dimensions and weights are nominal, subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult customer service for price and delivery.

± 16 AWG conductors are not listed as RHH or RHW-2.