



TECHNICAL BULLETIN:
HY-TREX LOW-CAPACITANCE VFD SHIELDED POWER CABLE
Part Number: 70042

Product Scope:

- TPC Low Capacitance VFD Cable, 12 AWG/4-Conductors
- UL, CSA
- 90°C maximum conductor temperature
- Type TC-ER, Type FMSC, Type CIC, Type AWM

Design References:

UL 1277	Electrical Power and Control Cables with Optional Fiber-Optic Members
UL 2277	Flexible Motor Supply Cable and Wind Turbine Tray Cable
UL 1581	Standard for Safety

Design Details:

Conductor

Material Soft drawn annealed stranded tinned copper conductors

Insulation

Material Power Conductors – XLPE
Ground Conductor - TPE

Color Primary Conductors – Black with Alpha-Numeric Identification
Ground Conductor – Green/Yellow

Shielding

Foil 100% Aluminum/Mylar/Aluminum in contact with Drain and Braid
Braid 85% minimum tinned copper braid shield

Drain Wire Flat braided tinned copper

Jacket

Material TPE Compound
Color Black



Cable Construction

- Three primary power conductors with one ground conductor.
- Aluminum/Mylar/Aluminum tape
- Drain wire
- Tinned copper braid shield placed over bundle, in physical contact with drain wire and foil shield
- Jacket over the complete cable bundle

Design Ratings:

Conductors	12 AWG, 65 strands/30 AWG
Voltage	600 Volts TC-ER 1000 Volts Type CIC, Flexible Motor Supply Cable Corona Resistant to 2000 Volts
Temperature	90° C Max Conductor Temperature
Flame Rating	FT4
Cable O.D.	0.612 Inches Nominal
Cable Weight	260 Lbs./1000 Feet Nominal
Ampacity	30 Amps based on 30° C ambient temperature, 90° C conductor temperature per NEC Table 310.16

Approvals

UL	Type TC-ER, Sunlight Resistant, Oil Resistant II, FT4 FMSC (Flexible Motor Supply Cable)
cUL	Type CIC – TC, FT4
CSA	AWM I/II A/B, FT4

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