



**TECHNICAL BULLETIN:**  
**STANDARD-FLEX (HY-TREX) Low-Capacitance VFD Shielded Power Cable w/Pairs**  
**Part Number: 70029**

**Product Scope:**

- TPC Low Capacitance VFD Cable, 12 AWG/4-Conductors + 16 AWG/2-Pair
- 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 Power – 12 AWG, 65/30 stranding Pairs – 16 AWG, 26/30 stranding
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Insulation

Material	Power Conductors – XLPE Ground Conductor – TPE
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Identification	Primary Conductors – Black with Alpha-Numeric Identification 1 - 3 Ground Conductor – Green/Yellow Pair 1 – Black with Alpha-Numeric 5 & 6 Pair 2 – Black with Alpha-Numeric 7 & 8
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Shielding

Pairs	Aluminum/Mylar wrap
Overall Foil	100% Aluminum/Mylar/Aluminum in contact with Drain and Braid
Overall Braid	85% minimum tinned copper braid shield
Drain Wires	18 AWG drain wires in each shielded pair Overall 12 AWG flat braided tinned copper

Jacket

Material	TPE Compound
Color	Black



### Design Ratings:

Voltage	600 Volts TC-ER 1000 Volts Type CIC, Flexible Motor Supply Cable
Temperature	90° C Max Conductor Temperature
Flame Rating	FT4
Cable O.D.	0.768 Inches Nominal
Cable Weight	335 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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