



Motion Control

Super-Trex® VFD Shielded Cable

Super-Trex® VFD Shielded Cable is ideal for harsh environment VFD applications where a longer lasting cable is desired or where cable flexibility during use or installation is critical. Designed specifically for variable frequency drives and to withstand the harsh electrical environment of typical VFD systems. This motion control cable is constructed with both a foil and braid shield and will withstand corona voltages up to 2,000 volts. Symmetrical grounds are used to reduce the effect of common-mode-voltage noise. It features a heavy-duty thermoset jacket that provides excellent protection against abrasion, impact, oil, chemicals, heat, and flame.



Ratings



600V (Type TC-ER)

1000V (Type R90)

Max Conductor Temperature 90°C

Type TC-ER

FT4 Flame Rating

Performance Characteristics

✓ Corona Resistant to 2000V

✓ Bend Radius (Static): 6x Cable O.D.

✓ Bend Radius (Dynamic): 8x Cable O.D.

Engineered to Resist

 Flexing

 Abrasion

 Impact

 Chemicals

Features & Benefits

Finely Stranded Tinned Copper Conductors
Fine stranding improves flex-life and reduces conductor fatigue and breakage. Tinned conductors resist corrosion and are easier to solder.

Symmetrical Grounding System
Three ground conductors placed symmetrically in the interstices of the power conductors with a spiral-wrapped skived PTFE tape to create a smooth round bundle and balance the cable electrically.

Ultra-Shield Aluminum/ Polyester Foil Shield and Tinned Drain Wire Construction
Provides 100% protection against EM and RF interference and a low impedance path to ground. Protects equipment and motor damage from electrical noise and "stray voltage".

Cross Linked TSE Insulation System
Corona-resistant cross linked insulation designed to maintain the demanding electrical requirements of VFD systems.

Specially Compounded Black TSE Jacket
Offers superior first-line defense against tearing, abrasion, impact, oil, ozone, and most chemicals. Flame and heat resistant. Extreme all-weather flexibility.

Ordering Information

For complete product ordering information, please scan the QR Code or contact your TPC sales representative

Part No.	Power Configuration (AWG/Cond)	Ground Size (Cond/AWG)*	Ampacity**			Nominal O.D. (in)	W.T. (lbs) Per 1,000 ft.	Standard Cable Gland***
			In Free Air	In Cable Tray	In Conduit			
89103	#4 - 3 Cond	3 x 12 AWG	114	95	89	1.19	1101	55011
89104	#2 - 3 Cond	3 x 10 AWG	152	130	119	1.34	1512	55014
89106	1/0 - 3 Cond	3 x 10 AWG	205	170	163	1.61	2174	55015
89107	2/0 - 3 Cond	3 x 10 AWG	237	195	186	1.70	2510	55015
89109	4/0 - 3 Cond	3 x 8 AWG	316	260	253	1.99	3727	55016
89110	262 kcmil - 3 Cond	3 x 6 AWG	362	297	285	2.21	4581	55017
89111	373 kcmil - 3 Cond	3 x 6 AWG	449	363	357	2.45	5968	55020
89112	444 kcmil - 3 Cond	3 x 6 AWG	497	402	395	2.60	6922	55020
89113	535 kcmil - 3 Cond	3 x 6 AWG	555	445	441	2.85	8246	N/A

Notes

*Ground sized in accordance with NEC Table 250.122 + UL1277 whichever is larger.

**Ampacity in Free Air based on 90°C conductor temperature, 30°C ambient temperature, per NEC Table B310.15(B)(2)(3)

**Ampacity in Cable Tray based on 90°C conductor temperature, 30°C ambient temperature, per NEC Table 310.15(B)(16)

**Ampacity in Conduit based on 90°C conductor temperature, 30°C ambient temperature, per NEC Table B310.15(B)(2)(1)

***Grip-Seals® Aluminum straight cable gland part number listed. Sizing based on nominal cable O.D. Due to process tolerances, a smaller/larger gland size may be required. Confirm NPT Fitting Size matches application.