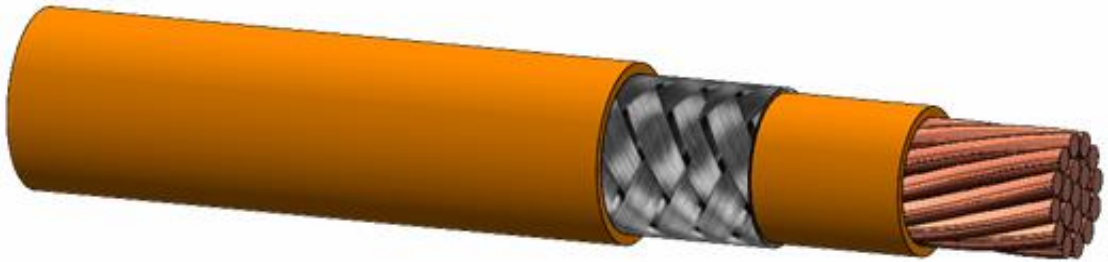


# PowerLink HV USA

## Shielded High Voltage (HV) Power Cable



MADE IN USA



### Performance & Design Benefits:

- Proudly made in the USA
- Tested to ISO 19642-5 & ISO 19642-9 (former ISO 6722 & ISO 14572)
- Rated Voltage Max 1000VAC and Max 1500VDC
- Operating Temperature of -40C to +150C ISO 6722 Class D
- 90% braid coverage minimum for excellent EMC Shielding
- Flexible design for improved cable assembly routing
- RoHS & REACH Compliant
- Durable and resistant to flame, liquids, chemicals, ozone, UV, water and abrasion
- Designed for Amphenol PowerLok G1 & G2 connectors, -5 Kits/Configurations
- Cable is designed for consistent, easy stripping & processing
- PPAP available on request
- Special constructions and customization options available

### Applications include:

- EV, HEV, FC EV
- On & Off-Highway Vehicles
- Heavy Duty/Industrial Equipment
- Battery & Energy Storage
- Data Centers

### Cabling examples include:

- Battery Pack to PDU
- PDU to Charger
- PDU to MCU
- MCU to Motor
- E-axle & E-motor



# PowerLink HV USA Shielded High Voltage (HV) Power Cable



## HV Shielded Cable Construction:

- Stranded Bare Copper Conductor
- Cross-Linked Polyolefin Orange Insulation, 150C
- Tinned Copper Braid Shield
- Cross Linked Polyolefin Orange Jacket, 150C
- Solution set includes the HV Shielded cable sizes ranging from 35mm<sup>2</sup> to 150mm<sup>2</sup>

## Cable Ordering Information

Part Number	Description
TFC-HV-35S-OR TFC-HV-50S-OR TFC-HV-70S-OR TFC-HV-95S-OR TFC-HV-120S-OR TFC-HV-150S-OR	SHIELDED HV CABLE 150C, XLPO ORANGE REEL

Component	Parameter	Units	35mm <sup>2</sup>		50mm <sup>2</sup>		70mm <sup>2</sup>		95mm <sup>2</sup>		120mm <sup>2</sup>		150mm <sup>2</sup>		
Conductor	Strand #	---		273		385		361		480		589		741	
	Strand Diameter	in	mm	0.0157	0.4	0.0157	0.4	0.0197	0.5	0.0197	0.5	0.0197	0.5	0.0197	0.5
	Diameter	in	mm	0.311	7.90	0.372	9.45	0.461	11.71	0.525	13.34	0.59	14.99	0.669	17.00
	DCR <sub>max</sub>	Ω/kft	Ω/km	0.112	0.368	0.109	0.368	0.079	0.259	0.06	0.96	0.047	0.154	0.037	0.122
Insulation	Wall Thickness	in	mm	0.035	0.90	0.038	0.97	0.04	1.02	0.053	1.35	0.055	1.4	0.059	1.50
	Diameter	in	mm	0.382	9.70	0.452	11.48	0.54	13.72	0.631	16.03	0.704	17.88	0.787	20.00
Braid	Diameter	in	mm	0.409	10.4	0.492	12.50	0.58	14.73	0.671	17.04	0.744	18.9	0.839	21.30
Sheath	Wall Thickness	in	mm	0.045	1.14	0.049	1.24	0.049	1.24	0.058	1.47	0.073	1.85	0.071	1.80
	Diameter	in	mm	0.500	12.70	0.59	14.99	0.677	17.20	0.787	19.99	0.891	22.63	0.980	24.90
Cable	Copper Weight	lb/ft	kg/m	0.2490	0.3706	0.3583	0.5332	0.4957	0.7376	0.6487	0.9654	0.7998	1.1902	1.0127	1.5071
	Total Weight	lb/ft	kg/m	0.3136	0.4667	0.4431	0.6594	0.5965	0.8877	0.8007	1.1916	0.9982	1.4855	1.2355	1.8386

**PowerLink HV USA Shielded power cables are in stock & available from our partner:**

Amphenol TPI: <https://www.tpil.com/product/powerlink-hv-usa>

# PowerLink HV USA

## Unshielded High Voltage (HV) Power Cable



MADE IN USA



### Performance & Design Benefits:

- Proudly made in the USA
- Tested to ISO 19642-5, Class D
- Rated Voltage Max 1000VAC and Max 1500VDC
- Operating Temperature of -40C to +150C
- Flexible design for improved cable assembly routing
- RoHS & REACH Compliant
- Durable and resistant to flame & liquids/chemicals, ozone & UV, water & abrasion
- Cable is designed for consistent, easy stripping & processing
- PPAP available on request
- Special constructions and customization options available

### HV Unshielded Cable Construction:

- Stranded Bare Copper Conductor
- Cross-Linked Polyolefin Orange Insulation, 150C (Black & Red options)

#### Measurements (Metric)

Part Number	Cond. Size (mm <sup>2</sup> )	Cond. Construction (mm)	Cond. OD (mm)	Insulation Thickness (mm)	Insulation OD (mm)	Copper Weight (kg/km)	Total Weight (kg/km)	Max DC Resistance (Ω/km)
TFC-HV-2.5-OR	2.5	83 / 0.19	2.06	0.60	3.30	22.41	29.18	7.60
TFC-HV-06-OR	6	199 / 0.19	3.35	0.60	4.80	54.02	64.01	3.14
TFC-HV-10-OR	10	332 / 0.19	4.25	1.00	6.25	93.25	114.65	1.78
TFC-HV-25-OR	25	829 / 0.19	6.75	1.43	9.60	230.70	279.10	0.72
TFC-HV-35-OR	35	1161 / 0.19	8.10	1.25	10.60	325.99	376.26	0.51
TFC-HV-50-OR	50	1658 / 0.19	9.50	1.50	12.50	465.71	536.73	0.36
TFC-HV-70-OR	70	2318 / 0.19	11.60	1.70	15.00	647.92	746.44	0.25
TFC-HV-95-OR	95	3108 / 0.19	13.20	1.90	17.00	849.69	975.15	0.19
TFC-HV-120-OR	120	3959 / 0.19	15.00	1.85	18.70	1082.22	1221.86	0.15

Note- Different colors are available: -OR: Orange, -BK: Black, -RD: Red

**PowerLink HV USA Unshielded power cables are available from our partner:**

Amphenol TPI: <https://www.tpil.com/product/powerlink-hv-usa>