

Medium Voltage

ATPC Medium Voltage Cables

Our Type MV cables are designed to meet UL Standard 1072 and are available in single-conductor medium voltage options ranging from 5kV to 35kV. The standard construction consists of a copper conductor, TR-XLPE insulation with 100% or 133% Insulation Levels, copper tape or 1/3 copper concentric neutral shield, and a PVC jacket. Available options include aluminum conductors or EPR insulation. Please consult with an ATPC Sales Representative to learn more.



Ratings



5kV up to 35kV

100% and 133% Insulation Level

Type MV-90 & MV-105

Cold Temperature Rating -40°C

Performance Characteristics

✓ Sunlight Resistant ✓ Oil Resistant I ✓ For use in Direct Burial applications when installed in accordance with NEC Article 315.36

Engineered to Resist



Abrasion



Impact



Cold Temperature

Features & Benefits

Soft Drawn Compressed Copper

Class B per ASTM B3 & ASTM B8

Copper Shield

Semi-conductive layer

TR-XLPE

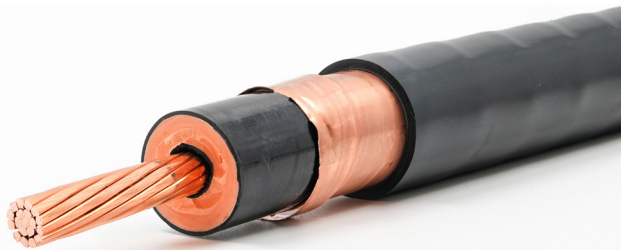
100% or 133% Insulation Level with semi-conductor insulation shield

Insulation Shield

Copper tape or 1/3 Concentric Neutral

PVC Jacket

Offers first-line defense against tearing, abrasion, impact, oil and most chemicals



Medium Voltage

Super-Trex® Unshielded Jumper Cable

Super-Trex® Unshielded Jumper Cable is a high-flex medium voltage single-conductor cable designed for temporary use. It is an ideal choice for industrial applications where an unshielded medium voltage cable is suitable. This includes temporary bypassing of damaged sections of power cable, or in areas such as switchgear enclosures or transformer vaults.



Ratings

15kV

Max Conductor Temperature 90°C

Performance Characteristics

✓ Bend Radius (Static): 6x 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.

Semi-Conductive Tape

Prevents the insulation compound from bonding to the conductor and allows for easy and clean stripping.

EPR Moisture and Heat Resistant Thermoset Insulation

Resists effects of lubricating oils, coolants, cutting oils, acids, and most chemicals. Provides protection from moisture and heat.

Specially Compounded Red 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.	Configuration AWG/Cond	Ampacity*	Nominal O.D. (in)	W.T. (lbs) Per 1,000 ft.
78006	6 AWG	110	0.820	360
78004	4 AWG	150	0.880	449
78002	2 AWG	195	0.940	563
78010	1/0 AWG	260	1.040	742
78020	2/0 AWG	300	1.080	869
78040	4/0 AWG	400	1.220	1,181
78350	350 kcmil	550	1.340	1,692
78500	500 kcmil	685	1.460	2,192



Notes

*Based on a conductor temperature of 90°C, ambient temperature of 40°C, 15,000 volts, single conductor in free air per NEC Table 315.60(C)(3).



Jumper cables are for use on equipment and in applications where an unshielded, flexible, medium voltage cable is required. Caution should be taken to limit access to these areas and cables to authorized trained personnel. Because these cables are not shielded, keep them positioned away from contact with grounds, transformer cases, etc. to avoid possible high electrical stress areas and capacitive leakage. Jumper cables are intended for temporary use; do not use them in applications that require a shielded medium voltage cable.

Medium Voltage

Super-Trex® Type SH Power Cable

Super-Trex® Type SH Power Cable is a highly flexible shielded medium voltage cable designed to Insulated Cable Engineers Association (ICEA) standards. Ideal for mobile substation applications and where flexibility and ease of use are required. It comes available in voltages from 5kV to 35kV. This power cable features an extra heavy-duty jacket that provides excellent protection against abrasion, impact, tearing, oil and most industrial chemicals. A copper braid insulation shield and fine conductor stranding significantly improve cable flexibility.



Ratings   ASTM B-33 ICEA S-75-381/NEMA WC-58 5kV, 15kV, 25kV and 35kV Voltage Ratings Max Conductor Temp 90°C FT1 – FT5 Flame Rating

Performance Characteristics ✓ Bend Radius (Static): 6x Cable O.D. ✓ Bend Radius (Dynamic): 8x Cable O.D.

Engineered to Resist  Flexing  Abrasion  Impact

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.

Combination Semi-Conductive Tape and Extruded Semi-Conductive TSE Conductor Shield

Bonded to the insulation for easy and clean stripping.

EPR Moisture and Heat Resistant Thermoset Insulation

Resists effects of lubricating oils, coolants, cutting oils, acids, and most chemicals. Provides protection from moisture and heat.

Combination Extruded Semi-Conductive Layer & Semi-Conductive Tape with Flexible Composite Braid Insulation Shield

Composite braid shield of tinned copper/nylon for superior flexibility & torsional movement.

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 ATPC sales representative

Part No.	Voltage	Conductor Size	Ampacity**	Conductor O.D. (in.)	Insulation O.D. (in.)	Nominal O.D. (in.)	W.T. (lbs) Per 1,000 ft.
70502	5kV	2 AWG	190	0.33	0.602	0.945	674
70540	5kV	4/0 AWG	400	0.585	0.87	1.3	1393
70525	5kV	250 kcmil	445	0.638	0.93	1.326	1481
70535	5kV	350 kcmil	550	0.759	1.05	1.49	1926
70550	5kV	500 kcmil	695	0.881	1.197	1.7	2662
70102	15kV	2 AWG	195	0.33	0.807	1.25	881
70110	15kV	1/0 AWG	260	0.409	0.899	1.325	1147
70140	15kV	4/0 AWG	400	0.585	1.08	1.61	1594
70125	15kV	250 kcmil	445	0.638	1.13	1.55	1760
70135	15kV	350 kcmil	550	0.759	1.245	1.765	2364
70150	15kV	500 kcmil	685	0.881	1.44	1.94	2937
70175	15kV	750 kcmil	885	1.095	1.63	2.15	3837
70114	15kV	1000 kcmil	1060	1.193	1.68	2.28	5074
70201	25kV	1 AWG	225	0.361	0.961	1.45	1170
70210	25kV	1/0 AWG	260	0.409	1.002	1.5	1297
70240	25kV	4/0 AWG	395	0.585	1.17	1.74	1960
70225	25kV	250 kcmil	440	0.638	1.4	1.85	2085
70235	25kV	350 kcmil	545	0.759	1.365	1.95	2636
70250	25kV	500 kcmil	680	0.881	1.56	2.15	3211
70275	25kV	750 kcmil	870	1.095	1.76	2.23	4253
702100	25kV	1000 kcmil	1040	1.193	1.95	2.5	5376
70316	35kV	1/0 AWG	260	0.409	1.187	1.725	1642
70340	35kV	4/0 AWG	395	0.585	1.332	1.94	2219
70325	35kV	250 kcmil	440	0.638	1.382	1.97	2509
70335	35kV	350 kcmil	545	0.759	1.514	2.1	2899
70350	35kV	500 kcmil	680	0.881	1.7	2.28	3396

ATPC provides in-house inventory and custom cuts to meet your stocking demands to ensure quick delivery. Our services also include installing MV terminations which are tested in-house with our expert technicians.

Can't find what you are looking for? Let ATPC customize a solution for your medium voltage cable needs with our team of expert engineers.

Notes

*Available on most sizes. Consult with your ATPC Sales Rep.

**Allowable ampacity per conductor of insulated single conductor in air based on conductor temperature of 90°C and ambient air temperature of 40°C. NEC Table 315.60(C)(3).

Medium Voltage

Super-Trex® Type MV-105 Cable

Super-Trex® Type MV-105 Medium Voltage is a single-conductor medium voltage cable for applications up to 15kV. This cable is ideal where tight spaces, a small bend radius or difficult installations are encountered.

This power cable features a braid insulation shield and fine conductor stranding that significantly improves cable flexibility, allowing installers/end-users to easily bend and maneuver the cable into tight spaces by hand.



Ratings



5kV and 15kV Ratings

133% Insulation Level

Max Conductor Temperature 105°C

Cold Temperature Rating -40°C

Type MV-105

For Cable Tray Use (Sizes 1/0 AWG and Larger)

FT4/IEEE 1202 Flame Rating

Performance Characteristics

- ✓ Sunlight Resistant
- ✓ Oil Resistant I
- ✓ Bend Radius (Static): 6x Cable O.D.
- ✓ Bend Radius (Dynamic): 8x Cable O.D.
- ✓ For use in Direct Burial applications when installed in accordance with NEC Article 315.36

Engineered to Resist



Flexing Abrasion Cold Temperature

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.

Combination Semi-Conductive Tape and Extruded Semi-Conductive TSE Conductor Shield

Bonded to the insulation for easy and clean stripping.

105°C EPR Moisture and Heat Resistant Thermoset Insulation

Resists effects of lubricating oils, coolants, cutting oils, acids, and most chemicals. Provides protection from moisture and heat.

Combination Extruded Semi-Conductive Layer & Semi-Conductive Tape with Flexible Composite Braid Insulation Shield

Composite braid shield of tinned copper/nylon for superior flexibility & torsional movement.

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 ATPC sales representative

Part No.	Voltage	Configuration AWG/Cond	Ampacity*	Conductor O.D. (in)	Insulation O.D. (in)	Nominal O.D. (in)	W.T. (lbs) Per 1,000 ft.
790101	5kV	1/0 AWG	290	0.409	0.650	0.945	709
790104	5kV	4/0 AWG	445	0.579	0.820	1.115	1109
790106	5kV	350 kcmil	615	0.759	0.996	1.300	1653
790211	15kV	1/0 AWG	290	0.409	0.903	1.221	940
790214	15kV	4/0 AWG	445	0.579	1.074	1.385	1402
790216	15kV	350 kcmil	610	0.759	1.257	1.575	1998
790217	15kV	500 kcmil	765	0.895	1.402	1.755	2588



Notes

*Based on ambient temperature of 40°C, single-conductor isolated in air, conductor temperature of 105°C, per NEC, Table 315.60(C)(3).