

Medium Voltage

ATPC Medium Voltage Cables

ATPC Type MV cables are designed to meet UL Standard 1072 and comply with industry standards ICEA S-93-639, S-94-649 and AEIC CS-8. Available in single conductor and three conductors plus ground. Voltage options from 5kV up to 35kV. Copper or aluminum conductors, NL-EPR, TR-XLPE or XLPE insulation with 100%/133%/173% insulation levels, copper tape shield or concentric neutrals. Jacket options include PVC, XLPE or LLDPE. Corrugated aluminum armor available for applications requiring additional protection against crush/impact.



Ratings



Type MV-90/MV-105

Complies with ICEA S-93-639

Complies with ICEA S-94-649

Complies with AEIC CS-8

Performance Characteristics

- ✓ Sunlight Resistant
- ✓ Direct Burial
- ✓ -35°C Cold Bend

Engineered to Resist



Abrasion



Impact



Cold Temperature

Features & Benefits

Compressed bare Copper or Aluminum conductors. Single or three conductors + Gnd.

Class B strand

Conductor Shield

Semi-conductive layer

Insulation

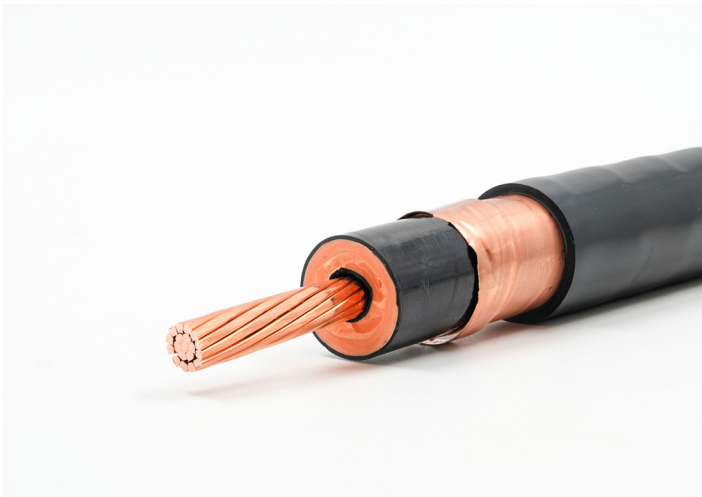
NL-EPR, XLPE or TR-XLPE with options for 100%, 133% or 173% insulation levels

Insulation Shield

Semi-conductive layer with options for copper tape shield or concentric neutral wires.

Jacket

PVC, XLPE, or LLDPE, offering a first-line defense against tearing, abrasion, impact, oil and most chemicals



Part Numbering Definition


Type	Max Cond Temp	Shield Type	Voltage	Cond Size	Insulation Level	Cond Material	Insulation Material	Jacket Material
MV (1-Cond.)	90 = 90°C	S = Copper Tape	5 = 5kV	00# = # AWG	100 = 100%	A = Aluminum	E = NL-EPR	L = LLDPE
3MV (3-Cond.)	105 = 105°C	N = 1/3 Concentric Neutral	15 = 15kV	0#0 = #/0 AWG	133 = 133%	C = Copper	T = TR-XLPE	P = PVC
		FN = Full Concentric Neutral	25 = 25kV	#### = #### kcmil	173 = 173%			
			35 = 35kV					X = XLPE

Corrugated Aluminum Armor or Interlocked Aluminum Armor available.

ATPC Type MV-105

15kV Alum/EPR/CTS/PVC

Type MV-105, 15kV cable listed to UL Standard 1072. Single-conductor sizes from 2 AWG up to 1500 kcmil. The standard construction consists of an aluminum conductor, extruded semi-conductive conductor shield, NL-EPR insulation with 100% or 133% Insulation Levels, extruded semi-conductive layer with copper tape shield, and jacketed with a rugged PVC compound. A triple extrusion process of the shields and insulation ensures reliable electrical characteristics and performance.

Ratings  Type MV-105 UL Std. 1072 Meets ICEA S-93-639 Meets AEIC CS-8

Performance Characteristics Sunlight Resistant Direct Burial -35°C Cold Bend

Engineered to Resist  Abrasion  Impact  Cold Temperature

Features & Benefits

Compressed Aluminum Conductor Class B strand	Conductor Shield Semi-conductive layer	Insulation No-lead Ethylene Propylene Rubber insulation. 100% or 133% Insulation Level.	Insulation Shield Semi-conductive layer with copper tape overall shield	PVC PVC, offering a first-line defense against tearing, abrasion, impact, oil and most chemicals
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Smart Part Numbering For complete product ordering information, please scan the QR Code or contact your TPC sales representative

Part Number	Voltage	Configuration (AWG/Cond)	Insulation Level	Ampacity ¹	Conductor O.D. (in)	Insulation O.D. (in)	Nominal O.D. (in.)	Weight (lbs) per 1,000 ft.
100% Insulation Level								
MV105S-15-002-100-AEP	15kV	2 AWG/1	100%	170	0.278	0.668	0.908	543
MV105S-15-001-100-AEP	15kV	1 AWG/1	100%	195	0.315	0.706	0.945	588
MV105S-15-010-100-AEP	15kV	1/0 AWG/1	100%	225	0.354	0.745	0.985	639
MV105S-15-020-100-AEP	15kV	2/0 AWG/1	100%	260	0.398	0.788	1.028	699
MV105S-15-030-100-AEP	15kV	3/0 AWG/1	100%	300	0.449	0.839	1.079	771
MV105S-15-040-100-AEP	15kV	4/0 AWG/1	100%	350	0.504	0.894	1.134	855
MV105S-15-250-100-AEP	15kV	250 kcmil/1	100%	385	0.547	0.938	1.178	925
MV105S-15-350-100-AEP	15kV	350 kcmil/1	100%	480	0.65	1.04	1.28	1,098
MV105S-15-500-100-AEP	15kV	500 kcmil/1	100%	600	0.772	1.162	1.402	1,333
MV105S-15-750-100-AEP	15kV	750 kcmil/1	100%	780	0.949	1.314	1.554	1,697
MV105S-15-1000-100-AEP	15kV	1000 kcmil/1	100%	940	1.094	1.464	1.774	2,175
MV105S-15-1250-100-AEP	15kV	1250 kcmil/1	100%	1080	1.228	1.728	2.038	2,770
MV105S-15-1500-100-AEP	15kV	1500 kcmil/1	100%	1215	1.343	1.861	2.171	3,155
133% Insulation Level								
MV105S-15-002-133-AEP	15kV	2 AWG/1	133%	170	0.278	0.758	0.998	645
MV105S-15-001-133-AEP	15kV	1 AWG/1	133%	195	0.315	0.795	1.035	694
MV105S-15-010-133-AEP	15kV	1/0 AWG/1	133%	225	0.354	0.835	1.074	750
MV105S-15-020-133-AEP	15kV	2/0 AWG/1	133%	260	0.398	0.878	1.118	814
MV105S-15-030-133-AEP	15kV	3/0 AWG/1	133%	300	0.449	0.929	1.169	891
MV105S-15-040-133-AEP	15kV	4/0 AWG/1	133%	350	0.504	0.984	1.224	980
MV105S-15-250-133-AEP	15kV	250 kcmil/1	133%	385	0.547	1.028	1.267	1,055
MV105S-15-350-133-AEP	15kV	350 kcmil/1	133%	480	0.65	1.13	1.37	1,238
MV105S-15-500-133-AEP	15kV	500 kcmil/1	133%	600	0.772	1.252	1.492	1,485
MV105S-15-750-133-AEP	15kV	750 kcmil/1	133%	780	0.949	1.404	1.644	1,863
MV105S-15-1000-133-AEP	15kV	1000 kcmil/1	133%	940	1.094	1.554	1.864	2,363
MV105S-15-1250-133-AEP	15kV	1250 kcmil/1	133%	1080	1.228	1.728	2.038	2,770
MV105S-15-1500-133-AEP	15kV	1500 kcmil/1	133%	1215	1.343	1.861	2.171	3,155

¹- Based on ambient temperature of 40C, conductor temperature of 105C, single conductor isolated in air; NEC Table 315.60(C)(4)

Medium Voltage

ATPC Type MV-105

15kV Copper/EPR/CTS/PVC

Type MV-105, 15kV cable listed to UL Standard 1072. Single-conductor sizes from 2 AWG up to 1500 kcmil. The standard construction consists of a copper conductor, extruded semi-conductive conductor shield, NL-EPR insulation with 100% or 133% Insulation Levels, extruded semi-conductive layer with copper tape shield, and jacketed with a rugged PVC compound. A triple extrusion process of the shields and insulation ensures reliable electrical characteristics and performance.

Ratings  Type MV-105 UL Std. 1072 Meets ICEA S-93-639 Meets AEIC CS-8

Performance Characteristics ✓ Sunlight Resistant ✓ Direct Burial ✓ -35°C Cold Bend

Engineered to Resist  Abrasion  Impact  Cold Temperature

Features & Benefits

Compressed bare Copper Conductor Class B strand	Conductor Shield Semi-conductive layer	Insulation No-lead Ethylene Propylene Rubber insulation. 100% or 133% Insulation Level.	Insulation Shield Semi-conductive layer with copper tape overall shield	Jacket PVC, offering a first-line defense against tearing, abrasion, impact, oil and most chemicals
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Smart Part Numbering For complete product ordering information, please scan the QR Code or contact your TPC sales representative

Part Number	Voltage	Configuration (AWG/Cond)	Insulation Level	Ampacity ¹	Conductor O.D. (in)	Insulation O.D. (in)	Nominal O.D. (in.)	Weight (lbs) per 1,000 ft.
100% Insulation Level								
MV105S-15-002-100-CEP	15kV	2 AWG/1	100%	215	0.278	0.668	0.908	683
MV105S-15-001-100-CEP	15kV	1 AWG/1	100%	250	0.315	0.706	0.945	764
MV105S-15-010-100-CEP	15kV	1/0 AWG/1	100%	290	0.354	0.745	0.985	862
MV105S-15-020-100-CEP	15kV	2/0 AWG/1	100%	355	0.398	0.788	1.028	980
MV105S-15-030-100-CEP	15kV	3/0 AWG/1	100%	385	0.449	0.839	1.079	1126
MV105S-15-040-100-CEP	15kV	4/0 AWG/1	100%	445	0.504	0.894	1.134	1301
MV105S-15-250-100-CEP	15kV	250 kcmil/1	100%	495	0.547	0.938	1.178	1454
MV105S-15-350-100-CEP	15kV	350 kcmil/1	100%	610	0.65	1.04	1.28	1838
MV105S-15-500-100-CEP	15kV	500 kcmil/1	100%	765	0.772	1.162	1.402	2390
MV105S-15-750-100-CEP	15kV	750 kcmil/1	100%	990	0.949	1.314	1.554	3282
MV105S-15-1000-100-CEP	15kV	1000 kcmil/1	100%	1185	1.094	1.464	1.774	4289
MV105S-15-1250-100-CEP	15kV	1250 kcmil/1	100%	1350	1.228	1.728	2.038	5413
MV105S-15-1500-100-CEP	15kV	1500 kcmil/1	100%	1500	1.343	1.861	2.171	6326
133% Insulation Level								
MV105S-15-002-133-CEP	15kV	2 AWG/1	133%	215	0.278	0.758	0.998	785
MV105S-15-001-133-CEP	15kV	1 AWG/1	133%	250	0.315	0.795	1.035	870
MV105S-15-010-133-CEP	15kV	1/0 AWG/1	133%	290	0.354	0.835	1.074	973
MV105S-15-020-133-CEP	15kV	2/0 AWG/1	133%	355	0.398	0.878	1.118	1095
MV105S-15-030-133-CEP	15kV	3/0 AWG/1	133%	385	0.449	0.929	1.169	1246
MV105S-15-040-133-CEP	15kV	4/0 AWG/1	133%	445	0.504	0.984	1.224	1426
MV105S-15-250-133-CEP	15kV	250 kcmil/1	133%	495	0.547	1.028	1.267	1583
MV105S-15-350-133-CEP	15kV	350 kcmil/1	133%	610	0.65	1.13	1.37	1978
MV105S-15-500-133-CEP	15kV	500 kcmil/1	133%	765	0.772	1.252	1.492	2542
MV105S-15-750-133-CEP	15kV	750 kcmil/1	133%	990	0.949	1.404	1.644	3449
MV105S-15-1000-133-CEP	15kV	1000 kcmil/1	133%	1185	1.094	1.554	1.864	4477
MV105S-15-1250-133-CEP	15kV	1250 kcmil/1	133%	1350	1.228	1.728	2.038	5413
MV105S-15-1500-133-CEP	15kV	1500 kcmil/1	133%	1500	1.343	1.861	2.171	6326

¹- Based on ambient temperature of 40C, conductor temperature of 105C, single conductor isolated in air, NEC Table 315.60(C)(4)

ATPC Type MV-105

35kV Alum/EPR/CTS/PVC

Type MV-105, 35kV cable listed to UL Standard 1072. Single-conductor sizes from 1/0 AWG up to 1500 kcmil. The standard construction consists of an aluminum conductor, extruded semi-conductive conductor shield, NL-EPR insulation with 100% or 133% Insulation Levels, extruded semi-conductive layer with copper tape shield, and jacketed with a rugged PVC compound. A triple extrusion process of the shields and insulation ensures reliable electrical characteristics and performance.

Ratings  Type MV-105 UL Std. 1072 Meets ICEA S-93-639 Meets AEIC CS-8

Performance Characteristics ✓ Sunlight Resistant ✓ Direct Burial ✓ -35°C Cold Bend

Engineered to Resist  Abrasion  Impact  Cold Temperature

Features & Benefits

Compressed Aluminum Conductor Class B	Conductor Shield Semi-conductive layer	Insulation No-lead Ethylene Propylene Rubber insulation. 100% or 133% Insulation Level.	Insulation Shield Semi-conductive layer with copper tape overall shield	Jacket PVC, offering a first-line defense against tearing, abrasion, impact, oil and most chemicals
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Smart Part Numbering For complete product ordering information, please scan the QR Code or contact your TPC sales representative

Part Number	Voltage	Configuration (AWG/Cond)	Insulation Level	Ampacity ¹	Conductor O.D. (in)	Insulation O.D. (in)	Nominal O.D. (in.)	Weight (lbs) per 1,000 ft.
100% Insulation Level								
MV105S-35-010-100-AEP	35kV	1/0 AWG/1	100%	225	0.354	1.084	1.324	1103
MV105S-35-020-100-AEP	35kV	2/0 AWG/1	100%	260	0.398	1.128	1.367	1179
MV105S-35-030-100-AEP	35kV	3/0 AWG/1	100%	300	0.449	1.179	1.418	1271
MV105S-35-040-100-AEP	35kV	4/0 AWG/1	100%	345	0.504	1.234	1.474	1375
MV105S-35-250-100-AEP	35kV	250 kcmil/1	100%	380	0.547	1.277	1.517	1461
MV105S-35-350-100-AEP	35kV	350 kcmil/1	100%	475	0.65	1.38	1.619	1672
MV105S-35-500-100-AEP	35kV	500 kcmil/1	100%	590	0.772	1.502	1.812	2082
MV105S-35-750-100-AEP	35kV	750 kcmil/1	100%	765	0.949	1.654	1.964	2514
MV105S-35-1000-100-AEP	35kV	1000 kcmil/1	100%	920	1.094	1.803	2.113	2931
MV105S-35-1250-100-AEP	35kV	1250 kcmil/1	100%	1055	1.228	1.978	2.288	3387
MV105S-35-1500-100-AEP	35kV	1500 kcmil/1	100%	1180	1.343	2.11	2.42	3808
133% Insulation Level								
MV105S-35-010-133-AEP	35kV	1/0 AWG/1	133%	225	0.354	1.235	1.474	1349
MV105S-35-020-133-AEP	35kV	2/0 AWG/1	133%	260	0.398	1.278	1.518	1432
MV105S-35-030-133-AEP	35kV	3/0 AWG/1	133%	300	0.449	1.329	1.569	1532
MV105S-35-040-133-AEP	35kV	4/0 AWG/1	133%	345	0.504	1.384	1.624	1646
MV105S-35-250-133-AEP	35kV	250 kcmil/1	133%	380	0.547	1.428	1.738	1863
MV105S-35-350-133-AEP	35kV	350 kcmil/1	133%	475	0.65	1.53	1.84	2099
MV105S-35-500-133-AEP	35kV	500 kcmil/1	133%	590	0.772	1.652	1.962	2408
MV105S-35-750-133-AEP	35kV	750 kcmil/1	133%	765	0.949	1.804	2.114	2865
MV105S-35-1000-133-AEP	35kV	1000 kcmil/1	133%	920	1.094	1.954	2.264	3307
MV105S-35-1250-133-AEP	35kV	1250 kcmil/1	133%	1055	1.228	2.128	2.438	3792
MV105S-35-1500-133-AEP	35kV	1500 kcmil/1	133%	1180	1.343	2.261	2.571	4234

¹- Based on ambient temperature of 40C, conductor temperature of 105C, single conductor isolated in air, NEC Table 315.60(C)(4)

ATPC Type MV-105

35kV Copper/EPR/CTS/PVC

Type MV-105, 35kV cable listed to UL Standard 1072. Single-conductor sizes from 1/0 AWG up to 1500 kcmil. The standard construction consists of a copper conductor, extruded semi-conductive conductor shield, NL-EPR insulation with 100% or 133% Insulation Levels, extruded semi-conductive layer with copper tape shield, and jacketed with a rugged PVC compound. A triple extrusion process of the shields and insulation ensures reliable electrical characteristics and performance.

Ratings  Type MV-105 UL Std. 1072 Meets ICEA S-93-639 Meets AEIC CS-8

Performance Characteristics ✓ Sunlight Resistant ✓ Direct Burial ✓ -35°C Cold Bend

Engineered to Resist  Abrasion  Impact  Cold Temperature

Features & Benefits

<p>Compressed Bare Copper Conductor</p> <p>Class B strand</p>	<p>Conductor Shield</p> <p>Semi-conductive layer</p>	<p>Insulation</p> <p>No-lead Ethylene Propylene Rubber insulation. 100% or 133% Insulation Level.</p>	<p>Insulation Shield</p> <p>Semi-conductive layer with copper tape overall shield</p>	<p>Jacket</p> <p>PVC, offering a first-line defense against tearing, abrasion, impact, oil and most chemicals</p>
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Smart Part Numbering For complete product ordering information, please scan the QR Code or contact your TPC sales representative

Part Number	Voltage	Configuration (AWG/Cond)	Insulation Level	Ampacity ¹	Conductor O.D. (in)	Insulation O.D. (in)	Nominal O.D. (in.)	Weight (lbs) per 1,000 ft.
100% Insulation Level								
MV105S-35-010-100-CEP	35kV	1/0 AWG/1	100%	290	0.354	1.084	1.324	1327
MV105S-35-020-100-CEP	35kV	2/0 AWG/1	100%	330	0.398	1.128	1.367	1460
MV105S-35-030-100-CEP	35kV	3/0 AWG/1	100%	380	0.449	1.179	1.418	1625
MV105S-35-040-100-CEP	35kV	4/0 AWG/1	100%	445	0.504	1.234	1.474	1821
MV105S-35-250-100-CEP	35kV	250 kcmil/1	100%	490	0.547	1.277	1.517	1990
MV105S-35-350-100-CEP	35kV	350 kcmil/1	100%	605	0.65	1.38	1.619	2412
MV105S-35-500-100-CEP	35kV	500 kcmil/1	100%	755	0.772	1.502	1.812	3139
MV105S-35-750-100-CEP	35kV	750 kcmil/1	100%	970	0.949	1.654	1.964	4099
MV105S-35-1000-100-CEP	35kV	1000 kcmil/1	100%	1160	1.094	1.803	2.113	5045
MV105S-35-1250-100-CEP	35kV	1250 kcmil/1	100%	1320	1.228	1.978	2.288	6030
MV105S-35-1500-100-CEP	35kV	1500 kcmil/1	100%	1465	1.343	2.11	2.42	6979
133% Insulation Level								
MV105S-35-010-133-CEP	35kV	1/0 AWG/1	133%	290	0.354	1.235	1.474	1573
MV105S-35-020-133-CEP	35kV	2/0 AWG/1	133%	330	0.398	1.278	1.518	1713
MV105S-35-030-133-CEP	35kV	3/0 AWG/1	133%	380	0.449	1.329	1.569	1887
MV105S-35-040-133-CEP	35kV	4/0 AWG/1	133%	445	0.504	1.384	1.624	2092
MV105S-35-250-133-CEP	35kV	250 kcmil/1	133%	490	0.547	1.428	1.738	2392
MV105S-35-350-133-CEP	35kV	350 kcmil/1	133%	605	0.65	1.53	1.84	2839
MV105S-35-500-133-CEP	35kV	500 kcmil/1	133%	755	0.772	1.652	1.962	3465
MV105S-35-750-133-CEP	35kV	750 kcmil/1	133%	970	0.949	1.804	2.114	4450
MV105S-35-1000-133-CEP	35kV	1000 kcmil/1	133%	1160	1.094	1.954	2.264	5421
MV105S-35-1250-133-CEP	35kV	1250 kcmil/1	133%	1320	1.228	2.128	2.438	6434
MV105S-35-1500-133-CEP	35kV	1500 kcmil/1	133%	1465	1.343	2.261	2.571	7405

¹- Based on ambient temperature of 40C, conductor temperature of 105C, single conductor isolated in air, NEC Table 315.60(C)(4)