

# MV-105

## 1C & 3C MEDIUM VOLTAGE POWER CABLE

### 5KV- 25KV 100% & 133% • 35KV 100%

#### PVC JACKET



# AmerCable

PVC Jacket

# MV-105

## Medium Voltage Power Cable



- Single & Three Conductor
- 5kV - 8kV • 100% & 133% Insulation Level

### Conductor

Bare, annealed copper conforming to ASTM B3 and Class B Compact stranded in accordance with ASTM B496.

### Grounding Conductor

Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance with ASTM B8.

### Insulation Shield Nonmetallic

Extruded semiconducting insulation shield meets or exceeds electrical and physical requirements of UL 1072.

### Conductor Shield

Extruded semiconducting conductor shield meets or exceeds electrical and physical requirements of UL 1072.

### Insulation

EPR meets or exceeds electrical and physical requirements of UL 1072.

### Metallic Shield

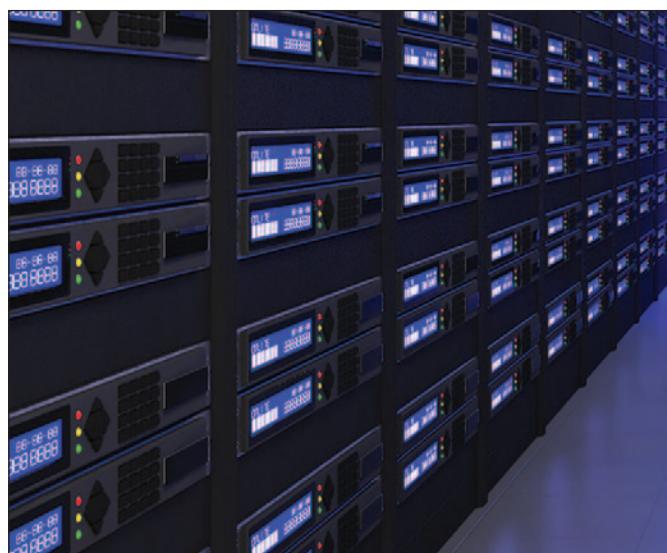
Bare copper tape shield helically wrapped to provide 100% coverage.

### Binder Tape

Synthetic material assembles the core in an essentially round configuration.

### Jacket

Overall polyvinyl chloride jacket per UL 1072, 90°C temperature rating; low acid gas emission; limited flame spread and excellent corrosion resistance. Also available with a mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket.



## APPLICATION

AmerCable medium voltage power cables are recommended for use as feeder circuits, in electric utility generating stations, for distribution circuits, and for feeders or branch circuits in industrial and commercial installations. Type MV cables may be installed in wet or dry locations, indoors or outdoors (exposed to sunlight), in any raceway or underground duct, directly buried if installed in a system with a grounding conductor in close proximity that conforms with NEC Section 250.4(A)(5), or messenger supported in industrial establishments and electric utilities.

## FEATURES

- UL listed as Type MV-105
- Flame retardant: UL 1685, may be marked "For CT Use"
- Excellent mechanical and physical properties
- Sunlight resistant jacket
- Suitable for direct burial, use in cable tray and embedment in concrete

## BEND RADIUS

- 1-conductor: 12X cable overall diameter
- 3-conductor: 12x individual shielded conductor, or 7x overall diameter, whichever is greater
- Triplexed 1/C: 12x individual shielded conductor, or 7x overall diameter, whichever is greater

## RATINGS & APPROVALS

- 105°C Temperature Rating
- Emergency Temperature Ratings
  - Overload: 140°C
  - Short Circuit: 250°C
- Meets UL 1072 requirements for medium voltage power cables
- Insulation meets electrical and physical requirements of ICEA S-93-639/NEMA WC 74 and UL 1072
- Meets AEIC CS 8 – specification for extruded dielectric shielded power cables rated 5 - 46kV (Qualification Test Requirements).
- Meets ICEA S-97-682 Standard for Shielded Utility Cable Rated for 5-46kV

## 5kV • 100% INSULATION • 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
101	8	90	0.575	231	74	—	95	0.6535	0.6663	0.8332	0.056	0.700
102	6	90	0.605	277	99	—	130	0.4112	0.4192	0.5242	0.053	0.451
103	4	90	0.645	344	130	—	165	0.2585	0.2636	0.3296	0.049	0.293
104	2	90	0.700	448	175	—	205	0.1626	0.1659	0.2075	0.045	0.193
105	1	90	0.735	518	205	—	240	0.1289	0.1315	0.1644	0.043	0.157
106	1/0	90	0.770	603	240	218	270	0.1022	0.1042	0.1304	0.041	0.129
107	2/0	90	0.810	707	275	248	310	0.0811	0.0827	0.1035	0.040	0.107
109	4/0	90	0.950	1035	475	334	405	0.0510	0.0520	0.0653	0.038	0.075
110	250	90	0.995	1179	415	371	445	0.0432	0.0440	0.0553	0.037	0.066
111	350	90	1.095	1546	515	461	580	0.0308	0.0314	0.0396	0.035	0.053
112	500	90	1.215	2074	645	581	635	0.0361	0.0220	0.0280	0.034	0.043
113	750	90	1.460	3001	835	750	780	0.0144	0.0147	0.0191	0.031	0.034



## 5kV 133% INSULATION • 8kV 100% INSULATION • 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
118	6	115	0.645	302	110	—	120	0.4112	0.4192	0.5242	0.054	0.452
119	4	115	0.690	374	140	—	160	0.2585	0.2636	0.3296	0.050	0.294
120	2	115	0.745	480	195	—	205	0.1626	0.1659	0.2075	0.047	0.194
121	1	115	0.775	547	225	—	230	0.1289	0.1315	0.1644	0.044	0.158
122	1/0	115	0.815	636	255	218	260	0.1022	0.1042	0.1304	0.043	0.130
123	2/0	115	0.895	779	295	251	295	0.0811	0.0827	0.1035	0.042	0.108
125	4/0	115	0.995	1076	390	334	385	0.0510	0.0520	0.0653	0.039	0.076
126	250	115	1.040	1222	430	371	410	0.0432	0.0440	0.0553	0.038	0.067
127	350	115	1.135	1586	525	458	505	0.0308	0.0314	0.0396	0.036	0.053
128	500	115	1.255	2119	650	574	605	0.0361	0.0220	0.0280	0.034	0.043
129	750	115	1.505	3059	820	743	740	0.0144	0.0147	0.0191	0.032	0.034



## 5kV 133% INSULATION • 8kV 100% INSULATION • 3/C

Part Number (37-505)	Size	Ground Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
						In Air	Cable Tray	Direct Burial					
302	6	6	115	1.305	1099	105	87	95	0.4112	0.4192	0.5242	0.049	0.449
303	4	6	115	1.400	1304	135	114	125	0.2585	0.2636	0.3296	0.045	0.291
304	2	6	115	1.520	1642	185	157	160	0.1626	0.1659	0.2075	0.042	0.191
305	1	4	115	1.590	1913	210	176	185	0.1289	0.1315	0.1644	0.040	0.156
306	1/0	4	115	1.635	2032	240	204	210	0.1022	0.1042	0.1304	0.038	0.127
307	2/0	4	115	1.810	2632	275	233	235	0.0811	0.0827	0.1035	0.037	0.105
309	4/0	3	115	2.030	3619	360	304	305	0.0510	0.0520	0.0653	0.035	0.073
310	250	3	115	2.125	4133	400	333	335	0.0432	0.0440	0.0553	0.034	0.065
311	350	2	115	2.335	5271	490	409	400	0.0308	0.0314	0.0396	0.032	0.051
312	500	1	115	2.595	7100	600	499	485	0.0361	0.0220	0.0280	0.031	0.041
313	750	1/0	115	3.190	10359	745	603	585	0.0144	0.0147	0.0191	0.029	0.033



### Single Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor cable triplexed in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C, with a derating factor of 0.75.
- 3) Ampacities for direct burial are based on NEC 2017 Table 310.60(C)(85) for triplexed insulated single conductor copper cable, directly buried, maximum conductor temperature of 105°C, ambient earth temperature of 20°C, 100% load factor, earth thermal resistivity of 90°C cm/W..

### Three Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(75), for insulated three conductor copper cable in isolated conduit in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C, with d derating factor of 0.95.
- 3) Ampacities for direct burial are based on NEC 2017 Table 310.60(C)(83), for insulated three conductor copper cable, directly buried, maximum conductor temperature of 105°C, ambient earth temperature of 20°C, 100 percent load factor, earth thermal resistivity of 90°C cm / W.

# MV-105

## Medium Voltage Power Cable

### Rated 15kV– 35kV



#### Conductor

Bare, annealed copper conforming to ASTM B3 and Class B Compact stranded in accordance with ASTM B496.

#### Grounding Conductor

Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance with ASTM B8.

#### Insulation Shield Nonmetallic

Extruded semiconducting insulation shield meets or exceeds electrical and physical requirements of UL 1072.

#### Conductor Shield

Extruded semiconducting conductor shield meets or exceeds electrical and physical requirements of UL 1072.

#### Insulation

EPR meets or exceeds electrical and physical requirements of UL 1072.

#### Metallic Shield

Bare copper tape shield helically wrapped to provide 100% coverage.

#### Binder Tape

Synthetic material assembles the core in an essentially round configuration.

#### Jacket

Overall polyvinyl chloride jacket per UL 1072, 90°C temperature rating; low acid gas emission; limited flame spread and excellent corrosion resistance.

Also available with a mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket.



## APPLICATION

AmerCable medium voltage power cables are recommended for use as feeder circuits, in electric utility generating stations, for distribution circuits, and for feeders or branch circuits in industrial and commercial installations. Type MV cables may be installed in wet or dry locations, indoors or outdoors (exposed to sunlight), in any raceway or underground duct, directly buried if installed in a system with a grounding conductor in close proximity that conforms with NEC Section 250.4(A)(5), or messenger supported in industrial establishments and electric utilities.

## FEATURES

UL listed as Type MV-105

- Flame retardant: UL 1685, may be marked "For CT Use"
- Excellent mechanical and physical properties
- Sunlight resistant jacket
- Suitable for direct burial, use in cable tray and embedment in concrete

## BEND RADIUS

- 1-conductor: 12X cable overall diameter
- 3-conductor: 12x individual shielded conductor, or 7x overall diameter, whichever is greater
- Triplexed 1/C: 12x individual shielded conductor, or 7x overall diameter, whichever is greater

## RATINGS & APPROVALS

- 105°C Temperature Rating
- Emergency Temperature Ratings
  - Overload: 140°C
  - Short Circuit: 250°C
- Meets UL 1072 requirements for medium voltage power cables
- Insulation meets electrical and physical requirements of ICEA S-93-639/NEMA WC 74 and UL 1072
- Meets AEIC CS 8 – specification for extruded dielectric shielded power cables rated 5 - 46kV (Qualification Test Requirements).
- Meets ICEA S-97-682 Standard for Shielded Utility Cable Rated for 5-46kV





## 15kV • 100% INSULATION • 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
164	2	220	1.005	700	195	—	205	0.1626	0.1659	0.2075	0.054	0.198
165	1	220	1.035	774	225	—	230	0.1289	0.1315	0.1644	0.051	0.162
166	1/0	220	1.070	867	255	218	260	0.1022	0.1042	0.1304	0.049	0.134
167	2/0	220	1.115	987	295	251	295	0.0811	0.0520	0.1035	0.047	0.111
169	4/0	220	1.210	1295	390	334	385	0.0510	0.0440	0.0653	0.044	0.079
170	250	220	1.275	1473	430	371	410	0.0432	0.0827	0.0553	0.043	0.070
171	350	220	1.370	1856	525	458	505	0.0308	0.0314	0.0396	0.040	0.056
172	500	220	1.480	2411	650	574	605	0.0361	0.0220	0.0280	0.038	0.045
173	750	220	1.780	3478	820	743	740	0.0144	0.0147	0.0191	0.036	0.037



## 15kV 133% INSULATION LEVEL • 3/C

Part Number (37-505)	Size	Ground Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
						In Air	Cable Tray	Direct Burial					
357	2	6	220	2.045	2401	185	157	160	0.1626	0.1659	0.2075	0.049	0.195
358	1	4	220	2.110	2729	210	176	185	0.1289	0.1315	0.1644	0.047	0.160
359	1/0	4	220	2.190	3069	240	204	210	0.1022	0.1042	0.1304	0.045	0.131
360	2/0	4	220	2.275	3343	275	233	235	0.0811	0.0827	0.1035	0.043	0.109
362	4/0	3	220	2.490	4345	360	304	305	0.0510	0.0520	0.0653	0.040	0.076
363	250	3	220	2.625	4957	400	333	335	0.0432	0.0440	0.0553	0.039	0.068
364	350	2	220	2.895	6349	490	409	400	0.0308	0.0314	0.0396	0.037	0.054
365	500	1	220	3.155	8359	600	499	485	0.0361	0.0220	0.0280	0.035	0.043
366	750	1/0	220	3.655	11657	745	603	585	0.0144	0.0147	0.0191	0.033	0.035

## 25kV 133% INSULATION • 35kV 100% INSULATION 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
180	1/0	345	1.350	1178	255	218	260	0.1022	0.1042	0.1304	0.054	0.144
181	2/0	345	1.385	1296	295	248	295	0.0811	0.0827	0.1035	0.052	0.115
183	4/0	345	1.485	1632	390	334	385	0.0510	0.0520	0.0653	0.049	0.072
184	250	345	1.530	1797	430	368	410	0.0432	0.0440	0.0553	0.047	0.061
185	350	345	1.625	2198	525	454	505	0.0308	0.0314	0.0396	0.044	0.043
186	500	345	1.805	2890	650	566	605	0.0361	0.0220	0.0280	0.043	0.042
187	750	345	2.055	3945	820	728	740	0.0144	0.0147	0.0191	0.039	0.020

### Single Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.
- 3) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.

### Three Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(75), for insulated three conductor copper cable in isolated conduit in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C, with a derating factor of 0.95.
- 3) Ampacities for direct burial are based on NEC 2017 Table 310.60(C)(83), for insulated three conductor copper cable, directly buried, maximum conductor temperature of 105°C, ambient earth temperature of 20°C, 100 percent load factor, earth thermal resistivity of 90°C cm / W.

# MV-105

## Medium Voltage Power Cable

### Rated 8kV– 25kV



#### Conductor

Bare, annealed copper conforming to ASTM B3 and Class B Compact stranded in accordance with ASTM B496.

#### Grounding Conductor

Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance with ASTM B8.

#### Insulation Shield Nonmetallic

Extruded semiconducting insulation shield meets or exceeds electrical and physical requirements of UL 1072.

#### Conductor Shield

Extruded semiconducting conductor shield meets or exceeds electrical and physical requirements of UL 1072.

#### Insulation

EPR meets or exceeds electrical and physical requirements of UL 1072.

#### Metallic Shield

Bare copper tape shield helically wrapped to provide 100% coverage.

#### Binder Tape

Synthetic material assembles the core in an essentially round configuration.

#### Jacket

Overall polyvinyl chloride jacket per UL 1072, 90°C temperature rating; low acid gas emission; limited flame spread and excellent corrosion resistance. Also available with a mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket.



## APPLICATION

AmerCable medium voltage power cables are recommended for use as feeder circuits, in electric utility generating stations, for distribution circuits, and for feeders or branch circuits in industrial and commercial installations. Type MV cables may be installed in wet or dry locations, indoors or outdoors (exposed to sunlight), in any raceway or underground duct, directly buried if installed in a system with a grounding conductor in close proximity that conforms with NEC Section 250.4(A)(5), or messenger supported in industrial establishments and electric utilities.

## FEATURES

UL listed as Type MV-105

- Flame retardant: UL 1685, may be marked "For CT Use"
- Excellent mechanical and physical properties
- Sunlight resistant jacket
- Suitable for direct burial, use in cable tray and embedment in concrete

## BEND RADIUS

- 1-conductor: 12X cable overall diameter
- 3-conductor: 12x individual shielded conductor, or 7x overall diameter, whichever is greater
- Triplexed 1/C: 12x individual shielded conductor, or 7x overall diameter, whichever is greater

## RATINGS & APPROVALS

- 105°C Temperature Rating
- Emergency Temperature Ratings
  - Overload: 140°C
  - Short Circuit: 250°C
- Meets UL 1072 requirements for medium voltage power cables
- Insulation meets electrical and physical requirements of ICEA S-93-639/NEMA WC 74 and UL 1072
- Meets AEIC CS 8 – specification for extruded dielectric shielded power cables rated 5 - 46kV (Qualification Test Requirements).
- Meets ICEA S-97-682 Standard for Shielded Utility Cable Rated for 5-46kV



## 8kV • 133% INSULATION • 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
134	6	0.140	0.745	342	110	—	120	0.4112	0.4192	0.5242	0.056	0.453
135	4	0.140	0.790	413	140	—	160	0.2585	0.2636	0.3296	0.052	0.295
136	2	0.140	0.880	548	195	—	205	0.1626	0.1659	0.2075	0.049	0.195
137	1	0.140	0.910	617	225	—	230	0.1289	0.1315	0.1644	0.047	0.160
138	1/0	0.140	0.950	709	255	218	260	0.1022	0.1042	0.1304	0.046	0.132
139	2/0	0.140	0.990	818	295	251	295	0.0811	0.0827	0.1035	0.044	0.109
141	4/0	0.140	0.080	1112	390	334	385	0.0510	0.0520	0.0653	0.041	0.077
142	250	0.140	1.125	1255	430	371	410	0.0432	0.0440	0.0553	0.039	0.068
144	350	0.140	1.235	1636	525	458	505	0.0308	0.0314	0.0396	0.038	0.054
146	500	0.140	1.350	2166	650	574	665	0.0361	0.0220	0.0280	0.036	0.044
148	750	0.140	1.610	3114	820	743	740	0.0144	0.0147	0.0191	0.035	0.036

## 8kV 133% INSULATION LEVEL • 3/C

Part Number (37-505)	Size	Ground Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
						In Air	Cable Tray	Direct Burial					
332	6	6	0.140	1.510	1185	105	87	95	0.4112	0.4192	0.5242	0.051	0.450
333	4	6	0.140	1.610	1412	125	114	125	0.2585	0.2636	0.3296	0.047	0.292
334	2	6	0.140	1.755	1358	185	157	160	0.1626	0.1659	0.2075	0.043	0.192
335	1	4	0.140	1.825	1596	210	176	185	0.1289	0.1315	0.1644	0.042	0.157
336	1/0	4	0.140	1.915	1874	240	204	210	0.1022	0.1042	0.1304	0.041	0.129
337	2/0	4	0.140	2.000	2168	275	233	235	0.0811	0.0827	0.1035	0.039	0.106
339	4/0	2	0.140	2.225	3750	360	304	305	0.0510	0.0520	0.0653	0.037	0.074
340	250	2	0.140	2.315	4220	400	333	335	0.0432	0.0440	0.0553	0.035	0.066
342	350	2	0.140	2.520	4598	490	409	400	0.0308	0.0314	0.0396	0.034	0.052
343	500	1	0.140	2.650	6122	600	499	485	0.0361	0.0220	0.0280	0.032	0.042
344	750	1/0	0.140	3.210	10115	745	603	585	0.0144	0.0147	0.0191	0.031	0.034

### Single Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.
- 3) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.

### Three Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(75), for insulated three conductor copper cable in isolated conduit in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C, with a derating factor of 0.95.
- 3) Ampacities for direct burial are based on NEC 2017 Table 310.60(C)(83), for insulated three conductor copper cable, directly buried, maximum conductor temperature of 105°C, ambient earth temperature of 20°C, 100 percent load factor, earth thermal resistivity of 90°C cm / W.



## 15kV 133% INSULATION • 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
150	2	0.175	0.945	601	195	—	205	0.1626	0.1659	0.2075	0.051	0.196
151	1	0.175	0.975	672	225	—	230	0.1289	0.1315	0.1644	0.049	0.161
152	1/0	0.175	1.015	765	255	218	260	0.1022	0.1042	0.1304	0.048	0.133
153	2/0	0.175	1.055	877	295	251	295	0.0811	0.0827	0.1035	0.045	0.110
155	4/0	0.175	1.155	1181	390	334	385	0.0510	0.0520	0.0653	0.042	0.078
156	250	0.175	1.210	1342	430	371	410	0.0432	0.0440	0.0553	0.041	0.069
158	350	0.175	1.300	1708	525	458	505	0.0308	0.0314	0.0396	0.039	0.055
160	500	0.175	1.415	2244	650	574	665	0.0361	0.0220	0.0280	0.037	0.044
162	750	0.175	1.605	3164	820	743	740	0.0144	0.0147	0.0191	0.035	0.036

## 15kV 100% INSULATION LEVEL • 3/C

Part Number (37-505)	Size	Ground Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
						In Air	Cable Tray	Direct Burial					
346	2	6	0.175	1.900	2001	185	157	160	0.1626	0.1659	0.2075	0.046	0.193
347	1	4	0.175	1.965	2263	210	176	185	0.1289	0.1315	0.1644	0.044	0.158
348	1/0	4	0.175	2.050	2575	240	204	210	0.1022	0.1042	0.1304	0.043	0.130
349	2/0	4	0.175	2.140	2918	275	233	235	0.0811	0.0827	0.1035	0.041	0.107
351	4/0	2	0.175	2.355	3969	360	304	305	0.0510	0.0520	0.0653	0.038	0.075
352	250	2	0.175	2.450	4449	400	333	335	0.0432	0.0440	0.0553	0.037	0.066
354	350	2	0.175	2.660	5607	490	409	400	0.0308	0.0314	0.0396	0.035	0.053
355	500	1	0.175	3.030	7623	600	499	485	0.0361	0.0220	0.0280	0.034	0.043
356	750	1/0	0.175	3.400	10573	745	603	585	0.0144	0.0147	0.0191	0.032	0.034

### Single Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.
- 3) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.

### Three Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(75), for insulated three conductor copper cable in isolated conduit in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C, with a derating factor of 0.95.
- 3) Ampacities for direct burial are based on NEC 2017 Table 310.60(C)(83), for insulated three conductor copper cable, directly buried, maximum conductor temperature of 105°C, ambient earth temperature of 20°C, 100 percent load factor, earth thermal resistivity of 90°C cm / W.





## 25kV • 100% INSULATION • 1/C

Part Number (37-505)	Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
					In Air	Cable Tray	Direct Burial					
175	1	0.260	1.170	856	225	—	230	0.1289	0.1315	0.1644	0.053	0.163
176	1/0	0.260	1.205	951	255	218	260	0.1022	0.1042	0.1304	0.052	0.135
177	2/0	0.260	1.245	1069	295	248	295	0.0811	0.0827	0.1035	0.049	0.112
178	4/0	0.260	1.345	1388	390	334	385	0.0510	0.0520	0.0653	0.046	0.080
179	250	0.260	1.385	1539	430	368	410	0.0432	0.0440	0.0553	0.044	0.071
188	350	0.260	1.545	2013	525	454	505	0.0308	0.0314	0.0396	0.043	0.057
190	500	0.260	1.665	2580	650	566	665	0.0361	0.0220	0.0280	0.040	0.047
191	750	0.260	1.860	3546	820	728	740	0.0144	0.0147	0.0191	0.038	0.038

## 25kV 100% INSULATION LEVEL • 3/C

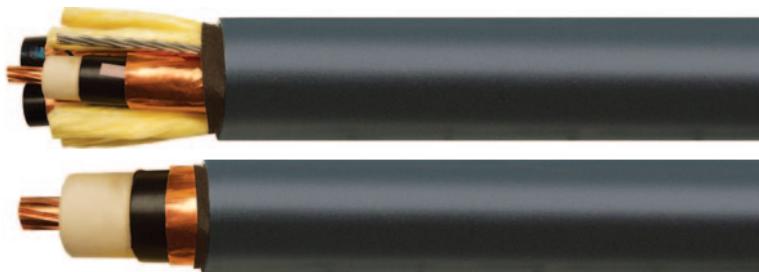
Part Number (37-505)	Size	Ground Size	Insulation Thickness	Outside Diameter	Weight (lbs/Kft)	Ampacities			DC Res. 20C Ω/kft	DC Res. 25C Ω/kft	AC Resist. 90C, 60 Hz Ω/kft	Inductive Reactance 90C, 60 Hz Ω/kft	Voltage Drop Volts/ Amps/kft
						In Air	Cable Tray	Direct Burial					
369	1	4	0.260	2.355	2870	210	176	185	0.1289	0.1315	0.1644	0.049	0.161
370	1/0	4	0.260	2.440	3189	240	204	210	0.1022	0.1042	0.1304	0.048	0.133
371	2/0	4	0.260	2.530	3561	275	233	235	0.0811	0.0827	0.1035	0.045	0.110
373	4/0	2	0.260	2.805	4807	360	304	305	0.0510	0.0520	0.0653	0.042	0.077
374	250	2	0.260	2.900	5312	400	333	335	0.0432	0.0440	0.0553	0.041	0.069
376	350	2	0.260	3.105	6550	490	409	400	0.0308	0.0314	0.0396	0.039	0.055
377	500	1	0.260	3.385	8439	600	499	485	0.0361	0.0220	0.0280	0.037	0.044
378	750	1/0	0.260	3.775	11517	745	603	585	0.0144	0.0147	0.0191	0.035	0.036

### Single Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.
- 3) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(69), for insulated single conductor copper cable isolated in air, maximum conductor temperature of 105C, ambient air temperature of 40C, with a derating factor of 0.75.

### Three Conductor Notes:

- 1) Ampacities in air are based on NEC 2017 Table 310.60(C)(71), for insulated three conductor copper cable isolated in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C.
- 2) Ampacities in cable tray are based on NEC 2017 Table 310.60(C)(75), for insulated three conductor copper cable in isolated conduit in air, maximum conductor temperature of 105°C, ambient air temperature of 40°C, with a derating factor of 0.95.
- 3) Ampacities for direct burial are based on NEC 2017 Table 310.60(C)(83), for insulated three conductor copper cable, directly buried, maximum conductor temperature of 105°C, ambient earth temperature of 20°C, 100 percent load factor, earth thermal resistivity of 90°C cm / W.



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