

## 5-35kV 1/C EPR MV-105 POWER (Tape Shield)

Medium Voltage Commercial & Industrial Cables



### Description

Single conductor cable with stranded copper or aluminum conductor, triple extruded insulation system consisting of a thermosetting semiconducting conductor shield, high dielectric strength EPROTENAX™ EPR insulation, thermosetting semiconducting insulation shield, helically applied bare copper tape shield, and black PVC jacket.

### Specifications

**AEIC-** AEIC CS8

**ICEA-** ICEA S-93-639

**ICEA-** ICEA S-97-682

**UL-** UL-1072

### Ratings

Type MV-105

Sunlight Resistant

For CT USE (1/0 AWG & Larger)

**IEEE-** IEEE 383 Flame Test (1/0 AWG and Larger)

**IEEE-** IEEE 1202 Flame Test (250 MCM and Larger)

For 105°C continuous, 140°C emergency,  
250°C short-circuit operation.

### Options

- Strandseal®
- Compressed or compact stranded conductors
- Colored Jackets
- LLDPE\*, CPE or LSOH Jacket
- Oil Resistant jacket
- Multiplex cables
- CSA C68.10 (FT4 250 MCM and larger, -40°C Cold Impact and Cold Bend)
- EASY GLIDER™ - Low Coefficient PVC Jacket

\*UL does not recognize LLDPE as MV-105

### Design Parameters

**CONDUCTOR:** Class B compact concentric strand aluminum alloy 1350 or compact concentric soft drawn annealed copper per ASTM.

**CONDUCTOR SHIELD:** Extruded thermosetting semiconducting shield which is free stripping from the conductor and bonded to the insulation.

**INSULATION:** Natural high dielectric strength EPROTENAX™ EPR-based insulation, combined with other materials and agents that enhance the electrical and mechanical characteristics assuring extended cable life.

**INSULATION SHIELD:** Extruded thermosetting semiconducting shield with controlled adhesion to the insulation providing the required balance between electrical integrity and ease of stripping.

**METALLIC SHIELD:** Helically applied non-magnetic copper tape(s) over the insulation shield with a nominal overlap of 25%.

**JACKET:** Black, sunlight resistant, polyvinyl chloride (PVC) jacket tightly applied over the copper tape.

### Installation



Conduit in Air



Direct Buried



Underground Duct



Isolated in Air



With Messenger



Wet Locations



Dry Locations



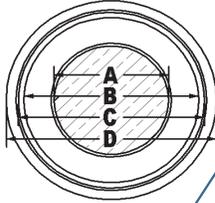
Industrial



In Cable Tray

## 5kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number		Conductor	Insulation Thickness (mil/s)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs /kft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
US Mfg.	Canada Mfg.		(A)	(B)	(C)	(D)			±105°C In Duct	±105°C In Air	
<b>5kV 100% Copper One Conductor</b>											
QJ241CA		4 AWG CU	90	0.215	0.44	0.50	0.63	316	8	120	160
QJ441CA		2 AWG CU	90	0.266	0.49	0.55	0.68	414	9	155	215
QJ641CA		1 AWG CU	90	0.299	0.53	0.58	0.72	480	9	180	250
QJ841CA		1/0 AWG CU	90	0.341	0.57	0.63	0.76	566	10	210	290
QJ941CA		2/0 AWG CU	90	0.376	0.60	0.66	0.79	665	10	235	330
QJA41CA		3/0 AWG CU	90	0.423	0.66	0.71	0.84	792	11	270	385
QJB41CA		4/0 AWG CU	90	0.479	0.71	0.76	0.93	974	12	310	445
QJC41CA		250 MCM CU	90	0.522	0.76	0.81	0.98	1116	12	345	495
QJD41CA		350 MCM CU	90	0.622	0.81	0.91	1.08	1468	13	415	615
QJE41CA		500 MCM CU	90	0.742	0.91	1.03	1.20	1982	15	505	775
QJF41CA		750 MCM CU	90	0.917	1.16	1.22	1.38	2861	17	630	1000
QJG41CA		1000 MCM CU	90	1.071	1.32	1.37	1.53	3676	19	720	1200
<b>5kV 133% Copper One Conductor</b>											
QK241CA		4 AWG CU	115	0.215	0.49	0.55	0.68	347	9	120	160
5 306293A	205833C	2 AWG CU	115	0.266	0.54	0.60	0.73	424	9	155	215
QK641CA		1 AWG CU	115	0.299	0.58	0.63	0.77	514	10	180	250
5 306294A	205834C	1/0 AWG CU	115	0.341	0.62	0.68	0.81	577	10	210	290
5 306295A	205835C	2/0 AWG CU	115	0.376	0.65	0.71	0.84	675	11	235	330
QKA41CA		3/0 AWG CU	115	0.423	0.70	0.76	0.92	857	12	270	385
5 306296A	205836C	4/0 AWG CU	115	0.479	0.76	0.82	0.97	982	12	310	445
5 306297A	205837C	250 MCM CU	115	0.522	0.81	0.86	1.02	1126	13	345	495
5 306298A	205838C	350 MCM CU	115	0.622	0.91	0.96	1.12	1475	14	415	615
5 306299A	205839C	500 MCM CU	115	0.742	1.03	1.08	1.24	1988	15	505	775
5 306300A	205840C	750 MCM CU	115	0.917	1.21	1.27	1.43	2863	18	630	1000
5 306893A	205841C	1000 MCM CU	115	1.071	1.38	1.43	1.59	3681	20	720	1200

† Ampacities are based on the following:

Three Phase Operation

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

In Duct per 2011 NEC Table 310.60(C)(77): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

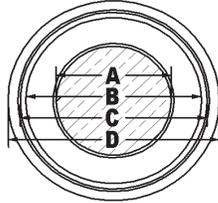
Isolated in Air per 2011 NEC Table 310.60(C)(69): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered cable tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated 2011 NEC Table 310.60(C)(69) (Copper), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

## 5kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/1000ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
									±105°C In Duct	±105°C In Air
<b>5kV 100% Aluminum One Conductor</b>										
QJK41CA	4 AWG AL	90	0.215	0.44	0.50	0.63	229	8	93	125
QJM41CA	2 AWG AL	90	0.266	0.49	0.55	0.68	275	9	125	165
QJO41CA	1 AWG AL	90	0.299	0.53	0.58	0.72	304	9	140	195
QJQ41CA	1/0 AWG AL	90	0.336	0.56	0.62	0.75	341	10	160	225
QJR41CA	2/0 AWG AL	90	0.379	0.61	0.66	0.80	385	10	185	260
QJS41CA	3/0 AWG AL	90	0.423	0.65	0.71	0.84	439	11	210	300
QJT41CA	4/0 AWG AL	90	0.479	0.71	0.76	0.93	530	12	245	350
QJU41CA	250 MCM AL	90	0.522	0.76	0.81	0.98	594	12	270	385
QJV41CA	350 MCM AL	90	0.622	0.86	0.91	1.08	732	13	325	480
QJW41CA	500 MCM AL	90	0.742	0.98	1.04	1.20	933	15	400	605
QJX41CA	750 MCM AL	90	0.917	1.16	1.22	1.38	1255	17	505	790
QJY41CA	1000 MCM AL	90	1.071	1.32	1.37	1.53	1572	19	590	950
<b>5kV 133% Aluminum One Conductor</b>										
QKK41CA	4 AWG AL	115	0.215	0.49	0.55	0.68	260	9	93	125
QKM41CA	2 AWG AL	115	0.266	0.54	0.60	0.73	308	9	125	165
QKO41CA	1 AWG AL	115	0.299	0.58	0.63	0.77	338	10	140	195
QKQ41CA	1/0 AWG AL	115	0.336	0.61	0.67	0.80	376	10	160	225
QKR41CA	2/0 AWG AL	115	0.379	0.66	0.71	0.85	422	11	185	260
QKS41CA	3/0 AWG AL	115	0.423	0.70	0.76	0.92	504	12	210	300
QKT41CA	4/0 AWG AL	115	0.479	0.76	0.81	0.98	572	13	245	350
QKU41CA	250 MCM AL	115	0.522	0.81	0.86	1.03	638	13	270	385
QKV41CA	350 MCM AL	115	0.622	0.91	0.96	1.13	780	14	325	480
QKW41CA	500 MCM AL	115	0.742	1.03	1.08	1.25	985	16	400	605
QKX41CA	750 MCM AL	115	0.917	1.21	1.27	1.43	1315	18	505	790
QKY41CA	1000 MCM AL	115	1.071	1.37	1.42	1.58	1638	20	590	950

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(78): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

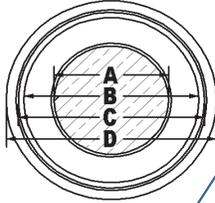
Isolated in Air per 2011 NEC Table 310.60(C)(70): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray Per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered table tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated in 2011 NEC Table 310.60(C)(70) (Aluminum), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

## 8kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number		Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/1000ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
US Mfg.	Canada Mfg.		(A)	(B)	(C)	(D)			±105°C In Duct	±105°C In Air	
<b>8kV 100% Copper One Conductor</b>											
QK241CA		4 AWG CU	115	0.215	0.49	0.55	0.68	347	9	120	160
§ 306293A	205833C	2 AWG CU	115	0.266	0.54	0.60	0.73	424	9	155	215
QK641CA		1 AWG CU	115	0.299	0.58	0.63	0.77	514	10	180	250
§ 306294A	205834C	1/0 AWG CU	115	0.341	0.62	0.68	0.81	577	10	210	290
§ 306295A	205835C	2/0 AWG CU	115	0.376	0.65	0.71	0.84	675	11	235	33
QKA41CA		3/0 AWG CU	115	0.423	0.70	0.76	0.92	857	12	270	385
§ 306296A	205836C	4/0 AWG CU	115	0.479	0.76	0.82	0.97	982	12	310	445
§ 306297A	205837C	250 MCM CU	115	0.522	0.81	0.86	1.02	1126	13	345	495
§ 306298A	205838C	350 MCM CU	115	0.622	0.91	0.96	1.12	1475	14	415	615
§ 306299A	205839C	500 MCM CU	115	0.742	1.03	1.08	1.24	1988	15	505	775
§ 306300A	205840C	750 MCM CU	115	0.917	1.21	1.27	1.43	2863	18	630	1000
§ 306893A	205841C	1000 MCM CU	115	1.071	1.38	1.43	1.59	3681	20	720	1200
<b>8kV 133% Copper One Conductor</b>											
QL441CA		2 AWG CU	140	0.266	0.60	0.66	0.80	489	10	165	215
QL641CA		1 AWG CU	140	0.299	0.63	0.68	0.82	549	10	185	250
QL841CA		1/0 AWG CU	140	0.341	0.67	0.73	0.86	638	11	215	290
QL941CA		2/0 AWG CU	140	0.376	0.70	0.76	0.93	767	12	245	335
QLA41CA		3/0 AWG CU	140	0.423	0.75	0.81	0.97	899	12	275	385
QLB41CA		4/0 AWG CU	140	0.479	0.81	0.86	1.03	1060	13	315	445
QLC41CA		250 MCM CU	140	0.522	0.86	0.91	1.08	1206	13	345	495
QLD41CA		350 MCM CU	140	0.622	0.96	1.01	1.18	1566	15	415	610
QLE41CA		500 MCM CU	140	0.742	1.08	1.13	1.30	2089	16	500	765
QLF41CA		750 MCM CU	140	0.917	1.26	1.32	1.48	2983	18	610	999
QLG41CA		1000 MCM CU	140	1.071	1.42	1.44	1.33	3810	20	690	1185

†Ampacities are based on the following:

**PRODUCT NOTES:**

§ Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(77): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

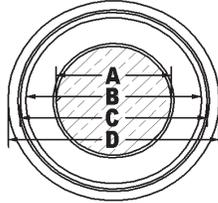
Isolated in Air per 2011 NEC Table 310.60(C)(69): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered cable tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated 2011 NEC Table 310.60(C)(69) (Copper), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

## 8kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/kft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
									±105°C In Duct	±105°C In Air
<b>8kV 100% Aluminum One Conductor</b>										
QKK41CA	4 AWG AL	115	0.215	0.49	0.55	0.68	260	9	93	125
QKM41CA	2 AWG AL	115	0.266	0.54	0.60	0.73	308	9	125	165
QKO41CA	1 AWG AL	115	0.299	0.58	0.63	0.77	338	10	140	195
QKQ41CA	1/0 AWG AL	115	0.336	0.61	0.67	0.80	376	10	160	225
QKR41CA	2/0 AWG AL	115	0.379	0.66	0.71	0.85	422	11	185	260
QKS41CA	3/0 AWG AL	115	0.423	0.70	0.76	0.92	504	12	210	300
QKT41CA	4/0 AWG AL	115	0.479	0.76	0.81	0.98	572	13	245	350
QKU41CA	250 MCM AL	115	0.522	0.81	0.86	1.03	638	13	270	385
QKV41CA	350 MCM AL	115	0.622	0.91	0.96	1.13	780	14	325	480
QKW41CA	500 MCM AL	115	0.742	1.03	1.08	1.25	985	16	400	605
QKX41CA	750 MCM AL	115	0.917	1.21	1.27	1.43	1315	18	505	790
QKY41CA	1000 MCM AL	115	1.071	1.37	1.42	1.58	1638	20	590	950
<b>8kV 133% Aluminum One Conductor</b>										
QLO41CA	1 AWG AL	140	0.299	0.63	0.68	0.82	374	10	145	195
QLQ41CA	1/0 AWG AL	140	0.336	0.66	0.72	0.85	414	11	165	225
QLR41CA	2/0 AWG AL	140	0.379	0.71	0.76	0.93	487	12	190	260
QLS41CA	3/0 AWG AL	140	0.423	0.75	0.81	0.97	546	12	215	300
QLT41CA	4/0 AWG AL	140	0.479	0.81	0.86	1.03	617	13	245	350
QLU41CA	250 MCM AL	140	0.522	0.86	0.91	1.08	684	13	270	385
QLV41CA	350 MCM AL	140	0.622	0.96	1.01	1.18	830	15	330	480
QLW41CA	500 MCM AL	140	0.742	1.08	1.13	1.30	1040	16	400	600
QLX41CA	750 MCM AL	140	0.917	1.26	1.32	1.48	1377	18	490	780
QLY41CA	1000 MCM AL	140	1.071	1.42	1.47	1.63	1706	20	565	940

†Ampacities are based on the following:

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(78): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

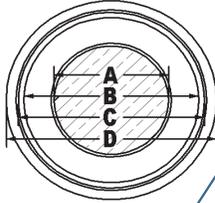
Isolated in Air per 2011 NEC Table 310.60(C)(70): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray Per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered cable tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated in 2011 NEC Table 310.60(C)(70) (Aluminum), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

# 15kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number		Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/1000ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
US Mfg.	Canada Mfg.		(A)	(B)	(C)	(D)				±105°C In Duct	±105°C In Air
<b>15kV 100% Copper One Conductor</b>											
QM441CA		2 AWG CU	175	0.266	0.65	0.71	0.84	525	11	165	215
QM641CA		1 AWG CU	175	0.299	0.69	0.74	0.91	621	11	185	250
QM841CA		1/0 AWG CU	175	0.341	0.73	0.79	0.95	713	12	215	290
QM941CA		2/0 AWG CU	175	0.376	0.76	0.82	0.98	818	12	245	335
QMA41CA		3/0 AWG CU	175	0.423	0.81	0.87	1.03	952	13	275	385
QMB41CA		4/0 AWG CU	175	0.479	0.87	0.92	1.09	1115	14	315	445
QMC41CA		250 MCM CU	175	0.522	0.92	0.97	1.14	1264	14	345	495
QMD41CA		350 MCM CU	175	0.622	1.02	1.07	1.24	1629	15	415	610
QME41CA		500 MCM CU	175	0.742	1.14	1.19	1.36	2157	17	500	765
QMF41CA		750 MCM CU	175	0.917	1.32	1.38	1.54	3060	19	610	990
QMG41CA		1000 MCM CU	175	1.071	1.48	1.53	1.69	3894	21	690	1185
<b>15kV 133% Copper One Conductor</b>											
³306302A	205842C	2 AWG CU	220	0.266	0.74	0.80	0.96	590	12	165	215
QN641CA		1 AWG CU	220	0.299	0.78	0.83	1.00	696	12	185	250
³306303A	205843C	1/0 AWG CU	220	0.341	0.82	0.88	1.04	762	13	215	290
³306304A	205844C	2/0 AWG CU	220	0.376	0.85	0.91	1.07	863	13	245	335
QNA41CA		3/0 AWG CU	220	0.423	0.90	0.96	1.12	1036	14	275	385
³306305A	205845C	4/0 AWG CU	220	0.479	0.96	1.02	1.17	1161	15	315	445
³306306A	205846C	250 MCM CU	220	0.522	1.01	1.06	1.22	1314	15	345	495
³306307A	205847C	350 MCM CU	220	0.622	1.11	1.16	1.32	1676	16	415	610
³306308A	205848C	500 MCM CU	220	0.742	1.23	1.28	1.44	2204	18	500	765
³306309A	205849C	750 MCM CU	220	0.917	1.41	1.47	1.63	3110	20	610	990
³306310A	205850C	1000 MCM CU	220	1.071	1.57	1.62	1.84	4056	23	690	1185

†Ampacities are based on the following:

**PRODUCT NOTES:**

§ Items are Prysmian authorized stock. The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(77): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

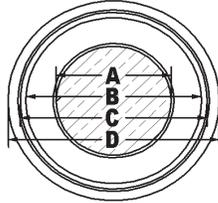
Isolated in Air per 2011 NEC Table 310.60(C)(69): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered cable tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated 2011 NEC Table 310.60(C)(69) (Copper), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

# 15kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/kft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
									±105°C In Duct	±105°C In Air
<b>15kV 100% Aluminum One Conductor</b>										
QMM41CA	2 AWG AL	175	0.266	0.65	0.71	0.84	386	11	130	170
QMO41CA	1 AWG AL	175	0.299	0.69	0.74	0.91	445	12	145	195
QMQ41CA	1/0 AWG AL	175	0.336	0.72	0.78	0.94	487	12	165	225
QMR41CA	2/0 AWG AL	175	0.379	0.77	0.82	0.99	538	12	190	260
QMS41CA	3/0 AWG AL	175	0.423	0.81	0.87	1.03	598	13	215	300
QMT41CA	4/0 AWG AL	175	0.479	0.87	0.92	1.09	672	14	245	350
QMU41CA	250 MCM AL	175	0.522	0.92	0.97	1.14	742	14	270	385
QMV41CA	350 MCM AL	175	0.622	1.02	1.07	1.24	893	15	330	480
QMW41CA	500 MCM AL	175	0.742	1.14	1.19	1.36	1108	17	400	600
QMX41CA	750 MCM AL	175	0.917	1.32	1.38	1.54	1454	19	490	780
QMY41CA	1000 MCM AL	175	1.071	1.48	1.53	1.69	1790	21	565	940
<b>15kV 133% Aluminum One Conductor</b>										
QNM41CA	2 AWG AL	220	0.266	0.74	0.80	0.96	484	12	130	170
QNO41CA	1 AWG AL	220	0.299	0.78	0.83	1.00	521	12	145	195
QNQ41CA	1/0 AWG AL	220	0.336	0.81	0.87	1.03	566	13	165	225
QNR41CA	2/0 AWG AL	220	0.379	0.86	0.91	1.08	620	13	190	260
QNS41CA	3/0 AWG AL	220	0.423	0.90	0.96	1.12	683	14	215	300
QNT41CA	4/0 AWG AL	220	0.479	0.96	1.01	1.18	761	15	245	350
QNU41CA	250 MCM AL	220	0.522	1.01	1.06	1.23	834	15	270	385
QNV41CA	350 MCM AL	220	0.622	1.11	1.16	1.33	992	16	330	480
QNW41CA	500 MCM AL	220	0.742	1.23	1.28	1.45	1216	18	400	600
QNX41CA	750 MCM AL	220	0.917	1.41	1.47	1.63	1574	20	490	780
QNY41CA	1000 MCM AL	220	1.071	1.57	1.62	1.84	2028	23	565	940

†Ampacities are based on the following:

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(78): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

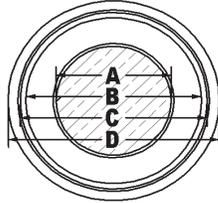
Isolated in Air per 2011 NEC Table 310.60(C)(70): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray Per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered table tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated in 2011 NEC Table 310.60(C)(70) (Aluminum), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

## 25kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/kft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
									±105°C In Duct	±105°C In Air
<b>25kV 100% Copper One Conductor</b>										
QO641CA	1AWG CU	260	0.299	0.85	0.90	1.07	760	13	185	250
QO841CA	1/0AWG CU	260	0.341	0.89	0.95	1.11	857	14	215	290
QO941CA	2/0AWG CU	260	0.376	0.92	0.98	1.14	967	14	245	330
QOA41CA	3/0AWG CU	260	0.423	0.97	1.03	1.19	1106	15	275	380
QOB41CA	4/0AWG CU	260	0.479	1.03	1.08	1.25	1277	15	315	445
QOC41CA	250MCM CU	260	0.522	1.08	1.13	1.30	1432	16	345	490
QOD41CA	350MCM CU	260	0.622	1.18	1.23	1.40	1809	17	415	605
QOE41CA	500MCM CU	260	0.742	1.30	1.35	1.52	2353	19	500	755
QOF41CA	750MCM CU	260	0.917	1.48	1.54	1.76	3379	22	610	970
QOG41CA	1000MCM CU	260	1.071	1.64	1.69	1.91	4242	23	690	1160
<b>25kV 133% Copper One Conductor</b>										
QP641CA	1AWG CU	320	0.299	0.98	1.04	1.20	894	15	245	330
QP841CA	1/0AWG CU	320	0.341	1.03	1.08	1.24	994	15	215	290
QP941CA	2/0AWG CU	320	0.376	1.06	1.12	1.28	1109	16	245	330
QPA41CA	3/0AWG CU	320	0.423	1.11	1.16	1.33	1254	16	275	380
QPB41CA	4/0AWG CU	320	0.479	1.16	1.22	1.38	1430	17	315	445
QPC41CA	250MCM CU	320	0.522	1.21	1.27	1.43	1591	18	345	490
QPD41CA	350MCM CU	320	0.622	1.31	1.37	1.53	1979	19	415	605
QPE41CA	500MCM CU	320	0.742	1.43	1.49	1.65	2535	20	500	755
QPF41CA	750MCM CU	320	0.917	1.62	1.67	1.90	3588	23	610	970
QPG41CA	1000MCM CU	320	1.071	1.77	1.83	2.05	4468	25	690	1160

† Ampacities are based on the following:

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(77): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

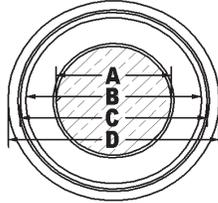
Isolated in Air per 2011 NEC Table 310.60(C)(69): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered table tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated 2011 NEC Table 310.60(C)(69) (Copper), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

## 25kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number	Conductor	Insulation Thickness (mils)	Insulation Diameter (in)				Jacket Diameter (in)	Cable Weight (lbs/1000ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
			(A)	(B)	(C)	(D)				±105°C In Duct	±105°C In Air
<b>25kV 100% Aluminum One Conductor</b>											
Q0041CA	1 AWG AL	260	0.299	0.84	0.90	1.07	584	13	145	195	
Q0Q41CA	1/0 AWG AL	260	0.336	0.88	0.94	1.10	632	14	165	225	
Q0R41CA	2/0 AWG AL	260	0.379	0.93	0.98	1.15	687	14	190	260	
Q0S41CA	3/0 AWG AL	260	0.423	0.97	1.03	1.19	754	15	215	300	
Q0T41CA	4/0 AWG AL	260	0.479	1.03	1.08	1.25	834	15	245	345	
Q0U41CA	250 MCM AL	260	0.522	1.08	1.13	1.30	910	16	270	380	
Q0V41CA	350 MCM AL	260	0.622	1.18	1.23	1.40	1074	17	330	475	
Q0W41CA	500 MCM AL	260	0.742	1.30	1.35	1.52	1304	19	400	590	
Q0X41CA	750 MCM AL	260	0.917	1.48	1.54	1.76	1773	23	490	765	
Q0Y41CA	1000 MCM AL	260	1.071	1.64	1.69	1.91	2138	24	565	920	
<b>25kV 133% Aluminum One Conductor</b>											
QP041CA	1 AWG AL	320	0.299	0.98	1.04	1.20	719	15	165	225	
QPQ41CA	1/0 AWG AL	320	0.336	1.20	1.08	1.24	770	15	165	225	
QPR41CA	2/0 AWG AL	320	0.379	1.06	1.12	1.28	830	16	190	260	
QPS41CA	3/0 AWG AL	320	0.423	1.11	1.16	1.33	901	16	215	300	
QPT41CA	4/0 AWG AL	320	0.479	1.16	1.22	1.38	987	17	245	345	
QPU41CA	250 MCM AL	320	0.522	1.21	1.27	1.43	1069	18	270	380	
QPV41CA	350 MCM AL	320	0.622	1.31	1.37	1.53	1243	19	330	475	
QPW41CA	500 MCM AL	320	0.742	1.43	1.49	1.65	1486	20	400	590	
QPX41CA	750 MCM AL	320	0.917	1.62	1.67	1.90	1983	23	490	765	
QPY41CA	1000 MCM AL	320	1.071	1.77	1.83	2.05	2364	25	565	920	

†Ampacities are based on the following:

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(78): Three single conductor cables in plastic duct., direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

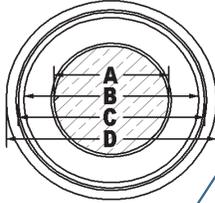
Isolated in Air per 2011 NEC Table 310.60(C)(70): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray Per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered table tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated in 2011 NEC Table 310.60(C)(70) (Aluminum), "Isolated in Air" values noted above.

‡EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

# 35kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number		Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/kft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
US Mfg.	Canada Mfg.		(A)	(B)	(C)	(D)			±105°C In Duct	±105°C In Air	
<b>35kV 100% Copper One Conductor</b>											
5 306311A	205851C	1/0 AWG CU	345	0.341	1.08	1.13	1.29	1011	16	215	290
QQ941CA		2/0 AWG CU	345	0.376	1.11	1.17	1.33	1165	16	245	330
QQA41CA		3/0 AWG CU	345	0.423	1.16	1.21	1.38	1312	17	275	380
5 306312A	205852C	4/0 AWG CU	345	0.479	1.21	1.27	1.43	1443	18	315	445
QQL41CA		250 MCM CU	345	0.522	1.26	1.32	1.48	1653	18	345	490
5306313A	205853C	350 MCM CU	345	0.622	1.36	1.42	1.58	1989	19	415	605
5 306314A	205854C	500 MCM CU	345	0.742	1.48	1.54	1.70	2542	21	500	755
QQF41CA		750 MCM CU	345	0.917	1.67	1.72	1.95	3670	24	610	970
QQC41CA		1000 MCM CU	345	1.071	1.82	1.88	2.10	4555	26	690	1160
<b>35kV 133% Copper One Conductor</b>											
QR841CA		1/0 AWG CU	420	0.341	1.22	1.27	1.43	1214	18	215	290
QR941CA		2/0 AWG CU	420	0.376	1.25	1.31	1.47	1279	19	245	330
QRA41CA		3/0 AWG CU	420	0.423	1.30	1.35	1.52	1428	19	275	380
QRB41CA		4/0 AWG CU	420	0.479	1.35	1.41	1.57	1669	19	315	445
QRC41CA		250 MCM CU	420	0.522	1.40	1.46	1.62	1837	20	345	490
QRD41CA		350 MCM CU	420	0.622	1.50	1.56	1.78	2342	22	415	605
QRE41CA		500 MCM CU	420	0.742	1.62	1.68	1.90	2924	23	500	755
QRF41CA		750 MCM CU	420	0.917	1.81	1.86	2.09	3906	26	610	970
QRC41CA		1000 MCM CU	420	1.071	1.96	2.02	2.24	4808	27	690	1160

† Ampacities are based on the following:

**PRODUCT NOTES:**

s Items are Prysmian authorized stock. The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(77): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

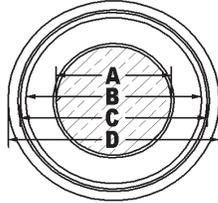
Isolated in Air per 2011 NEC Table 310.60(C)(69): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered table tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated 2011 NEC Table 310.60(C) (69) (Copper), "Isolated in Air" values noted above.

±EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

## 35kV 1/C EPR MV-105 POWER (Tape Shield)

100/133% Medium Voltage Commercial & Industrial Cables



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/1000ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
									±105°C In Duct	±105°C In Air
<b>35kV 100% Aluminum One Conductor</b>										
QQQ41CA	1/0 AWG AL	345	0.336	1.07	1.13	1.29	825	16	165	225
QQR41CA	2/0 AWG AL	345	0.379	1.11	1.17	1.33	886	16	190	260
QQS41CA	3/0 AWG AL	345	0.423	1.16	1.21	1.38	959	17	215	300
QQT41CA	4/0 AWG AL	345	0.479	1.21	1.27	1.43	1047	18	245	345
QQU41CA	250 MCM AL	345	0.522	1.26	1.32	1.48	1131	18	270	380
QQV41CA	350 MCM AL	345	0.622	1.36	1.42	1.58	1309	19	330	475
QQW41CA	500 MCM AL	345	0.742	1.48	1.54	1.70	1557	21	400	590
QQX41CA	750 MCM AL	345	0.917	1.68	1.77	2.01	2159	25	490	765
QQY41CA	1000 MCM AL	345	1.071	1.82	1.88	2.10	2450	26	565	920
<b>35kV 133% Aluminum One Conductor</b>										
QRQ41CA	1/0 AWG AL	420	0.336	1.21	1.27	1.43	987	18	165	225
QRR41CA	2/0 AWG AL	420	0.379	1.25	1.31	1.47	1054	18	190	260
QRS41CA	3/0 AWG AL	420	0.423	1.30	1.35	1.52	1131	19	215	300
QRT41CA	4/0 AWG AL	420	0.479	1.35	1.41	1.57	1226	19	245	345
QRU41CA	250 MCM AL	420	0.522	1.40	1.46	1.62	1315	20	270	380
QRV41CA	350 MCM AL	420	0.622	1.50	1.56	1.78	1606	22	330	475
QRW41CA	500 MCM AL	420	0.742	1.62	1.68	1.90	1875	23	400	590
QRX41CA	750 MCM AL	420	0.917	1.81	1.86	2.09	2300	26	490	765
QRY41CA	1000 MCM AL	420	1.071	1.96	2.02	2.24	2704	27	565	920

† Ampacities are based on the following:

**PRODUCT NOTES:**

s Items are Prysmian authorized stock.  
The above dimensions are approximate and subject to normal manufacturing tolerances.

**Three Phase Operation**

In Duct per 2011 NEC Table 310.60(C)(78): Three single conductor cables in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

Isolated in Air per 2011 NEC Table 310.60(C)(70): Insulated single conductor isolated in air, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray Per 2011 NEC 392.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an uncovered table tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated in 2011 NEC Table 310.60(C)(70) (Aluminum), "Isolated in Air" values noted above.

‡ EPROTENAX® EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.