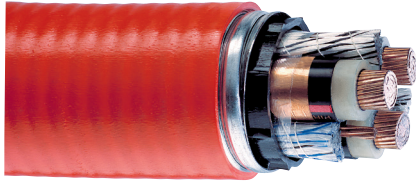


# 5-46kV 3/C TRXLPE Risertek<sup>®</sup>

## MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



### Applications

Three copper conductors, each with a semiconducting conductor shield, high dielectric strength VOLTALENE<sup>®</sup> TRXLPE insulation, semiconducting insulation shield, helically applied non-magnetic uncoated copper tape shield, cabled with fillers and a bare copper bonding conductor, heavy ribbed inner PVC jacket, galvanized steel interlocking armour (GSIA), and an overall PVC jacket.

### Specifications

**CSA-** CSA C22.2 No. 131

**CSA-** CSA C68.10

**CSA-** CSA C22.2 No.174

**IEEE-** IEEE 383

**ICEA-** ICEA T-29-520

**ICEA-** ICEA T-30-520

### Ratings

FT4

-40°C

Sunlight Resistant

HL

Flame Test

210,000 Btu Vertical Flame Test

70,000 Btu Vertical Flame Test

For 90°C continuous, 130°C emergency, 250°C short-circuit operation.

### Options

- Super smooth conductor shield
- EPROTENAX<sup>®</sup> (EPR) insulation
- Colored outer jacket
- Aluminum phase conductor and bonding conductor
- Multiple bonding conductors
- Strandseal<sup>®</sup>
- Overlapping copper tape shield
- AG14 Rating

### Design Parameters

**CONDUCTOR:** Three soft drawn, bare, Class B compact or compressed stranded copper conductors 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 tree-retardant crosslinked polyethylene (TRXLPE) VOLTALENE<sup>®</sup> insulation, exhibiting an optimum balance of mechanical and electrical properties, insuring resistance to treeing.

**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 uncoated copper tape over the insulation shield with a maximum 15% gap.

**ASSEMBLY:** Three conductors are twisted together with three soft drawn, bare copper bonding conductors, the core is fully filled and covered with a binder tape.

**INNER JACKET:** Heavy black ribbed PVC jacket is extruded over the assembly to prevent slipping of the core when in a vertical position.

**ARMOUR:** Flexible galvanized steel interlocking armour (GSIA) applied over the inner jacket for mechanical protection.

**OUTER JACKET:** Low-temperature, sunlight-resistant polyvinyl chloride (PVC) jacket applied over the armour.

### Installation



Mineshaft



Conduit in Air



Underground Duct



Wet Locations



Industrial



In Cable Tray



Direct Buried



Isolated in Air



Dry Locations

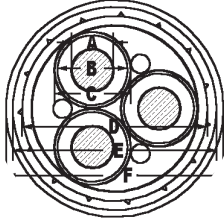
### Prysmian Group

700 Industrial Drive | Lexington, SC 29072 | +1-800-845-8507

137 Commerce Drive | Johnstown, Ontario K0E 1T1 | website: [na.prysmiangroup.com](http://na.prysmiangroup.com)

# 5kV 3/C TRXLPE Risertek®

100% MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Insulation Shield Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Jacket Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius	†Ampacity (Amps)
		(A)	(B)	(C)	(D)	(E)					90°C
<b>5kV 100% Copper Three Conductor</b>											
Q42680C	4 AWG CU	90	5.41	11.22	12.89	39.22	41.00	47.21	3326	356	105
Q44680C	2 AWG CU	90	6.81	12.61	14.29	42.24	44.01	50.22	3943	356	140
Q46680C	1 AWG CU	90	7.59	13.40	15.08	43.94	45.72	51.92	4316	381	160
Q48680C	1/0 AWG CU	90	8.59	14.39	16.07	46.08	48.62	54.83	5181	407	185
Q49680C	2/0 AWG CU	90	9.60	15.41	17.08	49.79	52.33	58.54	5974	432	215
Q4A680C	3/0 AWG CU	90	10.82	16.63	18.30	52.58	55.12	61.33	6772	432	250
Q4B680C	4/0 AWG CU	90	12.14	17.95	19.62	55.43	57.97	65.68	7850	483	285
Q4C680C	250 MCM CU	90	13.28	19.29	20.97	58.33	60.87	68.58	8669	483	320
Q4D680C	350 MCM CU	90	15.72	21.73	23.41	63.60	66.14	73.85	10603	534	395
Q4E680C	500 MCM CU	90	18.77	24.78	26.45	70.18	72.72	80.43	13314	610	485
Q4F680C	750 MCM CU	90	23.11	29.32	31.45	85.81	87.23	94.94	18578	686	615
Q4G680C	1000 MCM CU	90	26.92	33.13	35.26	94.31	95.73	103.44	23230	737	705

**PRODUCT NOTES:**

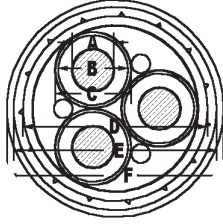
The above dimensions are approximate and subject to normal manufacturing tolerances. All metric (SI) dimensions are derived from a soft conversion.

**†Ampacities are based on the following:**

Isolated In Air or Uncovered Cable Tray. Three-conductor cable, spaced one cable diameter (minimum), 90°C conductor temperature, and 40°C ambient temperature, and shields short-circuited.  
Inner jacket diameter is measured over the ribs.

# 5 kV/8kV/8kV 3/C TRXLPE Risertek®

133%/100%/133% MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Insulation Shield Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Jacket Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius	†Ampacity (Amps)
		(A)	(B)	(C)	(D)	(E)					90°C
<b>5kV 133% /8kV 100% Copper Three Conductor</b>											
Q52680C	4 AWG CU	115	5.41	12.42	14.10	41.76	43.53	49.74	3551	356	120
Q54680C	2 AWG CU	115	6.81	13.82	15.49	44.77	47.31	53.52	4559	381	165
Q56680C	1 AWG CU	115	7.59	14.60	16.28	46.47	49.01	55.22	4951	407	185
Q58680C	1/0 AWG CU	115	8.59	15.59	17.27	50.21	52.91	59.12	5703	432	215
Q59680C	2/0 AWG CU	115	9.60	16.61	18.29	52.56	55.25	61.46	6301	432	245
Q5A680C	3/0 AWG CU	115	10.82	17.83	19.51	55.19	57.89	65.60	7308	483	285
Q5B680C	4/0 AWG CU	115	12.14	19.15	20.83	58.05	60.74	68.45	8192	483	325
Q5C680C	250 MCM CU	115	13.28	20.55	22.22	61.06	63.76	71.47	9035	508	360
Q5D680C	350 MCM CU	115	15.72	22.99	24.66	66.33	69.02	76.73	10987	559	435
Q5E680C	500 MCM CU	115	18.77	26.03	28.17	73.90	76.59	84.30	13870	610	535
Q5F680C	750 MCM CU	115	23.11	30.63	32.76	88.73	90.16	97.87	19035	686	670
Q5G680C	1000 MCM CU	115	26.92	34.44	36.57	97.24	98.66	106.37	23721	762	770
<b>8kV 133% Copper Three Conductor</b>											
Q64680C	2 AWG CU	140	6.81	15.15	16.82	47.65	50.19	56.40	4858	407	165
Q66680C	1 AWG CU	140	7.59	15.93	17.61	51.10	53.79	60.00	5529	432	185
Q68680C	1/0 AWG CU	140	8.59	16.92	18.60	53.24	55.93	62.14	6039	458	215
Q69680C	2/0 AWG CU	140	9.60	17.94	19.62	55.43	58.13	65.84	6844	483	245
Q6A680C	3/0 AWG CU	140	10.82	19.16	20.84	58.07	60.76	68.47	7656	483	285
Q6B680C	4/0 AWG CU	140	12.14	20.48	22.16	60.92	63.61	71.32	8548	508	325
Q6C680C	250 MCM CU	140	13.28	21.88	23.55	63.94	66.63	74.34	9401	534	360
Q6D680C	350 MCM CU	140	15.72	24.32	25.99	69.21	71.90	79.61	11370	610	435
Q6E680C	500 MCM CU	140	18.77	27.36	29.50	81.68	83.10	90.81	14864	661	535
Q6F680C	750 MCM CU	140	23.11	31.96	34.09	91.61	93.03	100.74	19484	712	670
Q6G680C	1000 MCM CU	140	26.92	35.77	37.90	100.11	101.54	109.25	24203	788	770
Q4G680C	1000 MCM CU	90	26.92	33.13	35.26	94.31	95.73	103.44	23230	737	705

**PRODUCT NOTES:**

The above dimensions are approximate and subject to normal manufacturing tolerances. All metric (SI) dimensions are derived from a soft conversion.

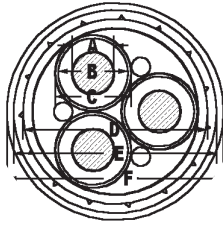
†Ampacities are based on the following:

Isolated In Air or Uncovered Cable Tray: Three-conductor cable, spaced one cable diameter (minimum), 90°C conductor temperature, and 40°C ambient temperature, and shields short-circuited.

Inner jacket diameter is measured over the ribs.

# 15kV 3/C TRXLPE Risertek®

100%/133% MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Insulation Shield Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Jacket Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius	†Ampacity (Amps)
<b>15kV 100% Copper Three Conductor</b>											
Q74680C	2 AWG CU	175	6.81	16.93	18.60	53.24	55.94	62.15	5555	458	165
Q76680C	1 AWG CU	175	7.59	17.71	19.39	54.95	57.64	65.35	6178	483	185
Q78680C	1/0 AWG CU	175	8.59	18.70	20.38	57.09	59.78	67.49	6703	483	215
Q79680C	2/0 AWG CU	175	9.60	19.72	21.40	59.28	61.97	69.68	7312	508	245
Q7A680C	3/0 AWG CU	175	10.82	20.94	22.62	61.91	64.61	72.32	8134	508	285
Q7B680C	4/0 AWG CU	175	12.14	22.26	23.94	64.77	67.46	75.17	9039	534	325
Q7C680C	250 MCM CU	175	13.28	23.66	25.33	67.78	70.48	78.19	9905	610	360
Q7D680C	350 MCM CU	175	15.72	26.10	28.23	74.04	76.73	84.44	12046	610	435
Q7E680C	500 MCM CU	175	18.77	29.14	31.28	85.52	86.95	94.66	15437	686	535
Q7F680C	750 MCM CU	175	23.11	33.74	35.87	95.45	96.88	104.59	20100	737	670
Q5F680C	750 MCM CU	115	23.11	30.63	32.76	88.73	90.16	97.87	19035	686	670
Q5G680C	1000 MCM CU	115	26.92	34.44	36.57	97.24	98.66	106.37	23721	762	770
<b>15kV 133% Copper Three Conductor</b>											
Q84680C	2 AWG CU	220	6.81	19.26	20.93	58.28	60.97	68.68	6365	483	165
Q86680C	1 AWG CU	220	7.59	20.04	21.72	59.98	62.67	70.38	6791	508	185
Q88680C	1/0 AWG CU	220	8.59	21.04	22.71	62.12	64.81	72.52	7328	508	215
Q89680C	2/0 AWG CU	220	9.60	22.05	23.73	64.31	67.01	74.72	7949	534	245
Q8A680C	3/0 AWG CU	220	10.82	23.27	24.95	66.95	69.64	77.35	8786	559	285
Q8B680C	4/0 AWG CU	220	12.14	24.59	26.27	69.80	72.49	80.20	9707	610	325
Q8C680C	250 MCM CU	220	13.28	25.99	27.66	72.82	75.51	83.22	10590	610	360
Q8D680C	350 MCM CU	220	15.72	28.43	30.56	83.97	85.40	93.11	13361	661	435
Q8E680C	500 MCM CU	220	18.77	31.47	33.61	90.56	91.98	99.69	16213	712	535
Q8F680C	750 MCM CU	220	23.11	36.07	38.21	100.49	101.91	109.62	20931	788	670
Q6G680C	1000 MCM CU	140	26.92	35.77	37.90	100.11	101.54	109.25	24203	788	770
Q4G680C	1000 MCM CU	90	26.92	33.13	35.26	94.31	95.73	103.44	23230	737	705

**PRODUCT NOTES:**

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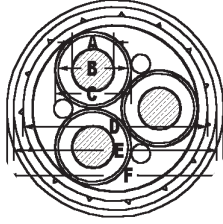
**†Ampacities are based on the following:**

Isolated In Air or Uncovered Cable Tray: Three-conductor cable, spaced one cable diameter (minimum), 90°C conductor temperature, and 40°C ambient temperature, and shields short-circuited.

Inner jacket diameter is measured over the ribs.

## 25kV 3/C TRXLPE Risertek®

100%/133% MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Insulation Shield Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Jacket Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius	†Ampacity (Amps)
			(A)	(B)	(C)	(D)	(E)				90°C
<b>25kV 100% Copper Three Conductor</b>											
Q96680C	1 AWG CU	260	7.59	22.12	23.79	64.45	67.15	74.85	7359	534	185
Q98680C	1/0 AWG CU	260	8.59	23.11	24.78	66.59	69.28	76.99	7907	559	215
Q99680C	2/0 AWG CU	260	9.60	24.12	25.80	68.79	71.48	79.19	8539	610	245
Q9A680C	3/0 AWG CU	260	10.82	25.34	27.02	71.42	74.11	81.82	9389	610	285
Q9B680C	4/0 AWG CU	260	12.14	26.66	28.80	75.26	77.95	85.66	10475	610	325
Q9C680C	250 MCM CU	260	13.28	28.06	30.19	83.18	84.60	92.31	11969	661	360
Q9D680C	350 MCM CU	260	15.72	30.50	32.63	88.45	89.87	97.58	14041	686	435
Q9E680C	500 MCM CU	260	18.77	33.55	35.68	95.03	96.45	104.16	16925	737	535
Q9F680C	750 MCM CU	260	23.11	38.14	40.28	104.96	106.38	114.09	21692	813	670
<b>25kV 133% Copper Three Conductor</b>											
QA8680C	1/0 AWG CU	320	8.59	26.27	28.40	74.41	77.10	84.81	8984	610	215
QA9680C	2/0 AWG CU	320	9.60	27.28	29.42	81.51	82.93	90.64	10221	635	245
QAA680C	3/0 AWG CU	320	10.82	28.50	30.64	84.14	85.56	93.27	11104	661	285
QAB680C	4/0 AWG CU	320	12.14	29.82	31.96	86.99	88.41	96.12	12074	686	325
QAC680C	250 MCM CU	320	13.28	31.22	33.35	90.01	91.43	99.14	13010	712	360
QAD680C	350 MCM CU	320	15.72	33.66	35.79	95.28	96.70	104.41	15121	737	435
QAE680C	500 MCM CU	320	18.77	36.71	38.84	101.86	103.28	110.99	18056	788	535

**PRODUCT NOTES:**

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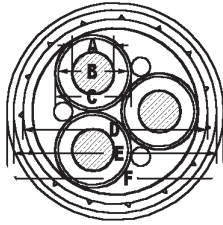
**†Ampacities are based on the following:**

Isolated In Air or Uncovered Cable Tray: Three-conductor cable, spaced one cable diameter (minimum), 90°C conductor temperature, and 40°C ambient temperature, and shields short-circuited.

Inner jacket diameter is measured over the ribs.

## 28kV 3/C TRXLPE Risertek®

100%/133% MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Insulation Shield Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Jacket Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius	†Ampacity (Amps)
		(A)	(B)	(C)	(D)	(E)					90°C
<b>28kV 100% Copper Three Conductor</b>											
QV6680C	1 AWG CU	280	7.59	23.19	24.86	66.77	69.46	77.17	7661	559	185
QV8680C	1/0 AWG CU	280	8.59	24.18	25.85	68.91	71.60	79.31	8215	610	215
QV9680C	2/0 AWG CU	280	9.60	25.19	26.87	71.10	73.79	81.50	8852	610	245
QVA680C	3/0 AWG CU	280	10.82	26.41	28.55	74.72	77.41	85.12	9860	610	285
QVB680C	4/0 AWG CU	280	12.14	27.73	29.87	82.48	83.90	91.61	11395	661	325
QVC680C	250 MCM CU	280	13.28	29.13	31.26	85.49	86.92	94.63	12315	686	360
QVD680C	350 MCM CU	280	15.72	31.57	33.70	90.76	92.18	99.89	14401	712	435
QVE680C	500 MCM CU	280	18.77	34.62	36.75	97.34	98.77	106.48	17302	762	535
<b>28kV 133% Copper Three Conductor</b>											
QB6680C	1 AWG CU	345	7.59	26.64	28.77	75.21	77.90	85.61	8828	610	185
QB8680C	1/0 AWG CU	345	8.59	27.63	29.76	82.25	83.67	91.38	9991	661	215
QB9680C	2/0 AWG CU	345	9.60	28.65	30.78	84.45	85.87	93.58	10657	661	245
QBA680C	3/0 AWG CU	345	10.82	29.86	32.00	87.08	88.50	96.21	11549	686	285
QBB680C	4/0 AWG CU	345	12.14	31.19	33.32	89.93	91.36	99.07	12528	712	325
QBC680C	250 MCM CU	345	13.28	32.58	34.72	92.95	94.37	102.08	13474	737	360
QBD680C	350 MCM CU	345	15.72	35.02	37.15	98.22	99.64	107.35	15603	762	435
QBE680C	500 MCM CU	345	18.77	38.07	40.20	104.80	106.22	113.93	18558	813	535

**PRODUCT NOTES:**

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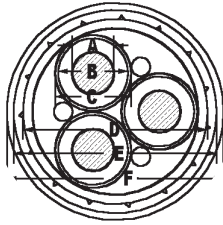
**†Ampacities are based on the following:**

Isolated In Air or Uncovered Cable Tray: Three-conductor cable, spaced one cable diameter (minimum), 90°C conductor temperature, and 40°C ambient temperature, and shields short-circuited.

Inner jacket diameter is measured over the ribs.

# 35kV 3/C TRXLPE Risertek®

100%/133% MEDIUM VOLTAGE COMMERCIAL & INDUSTRIAL CABLES



Product Number	Conductor	Insulation Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Insulation Shield Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Jacket Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius	†Ampacity (Amps)
		(A)	(B)	(C)	(D)	(E)					90°C
<b>35kV 100% Copper Three Conductor</b>											
QB6680C	1 AWG CU	345	7.59	26.64	28.77	75.21	77.90	85.61	8828	610	185
QB8680C	1/0 AWG CU	345	8.59	27.63	29.76	82.25	83.67	91.38	9991	661	215
QB9680C	2/0 AWG CU	345	9.60	28.65	30.78	84.45	85.87	93.58	10657	661	245
QBA680C	3/0 AWG CU	345	10.82	29.86	32.00	87.08	88.50	96.21	11549	686	285
QBB680C	4/0 AWG CU	345	12.14	31.19	33.32	89.93	91.36	99.07	12528	712	325
QBC680C	250 MCM CU	345	13.28	32.58	34.72	92.95	94.37	102.08	13474	737	360
QBD680C	350 MCM CU	345	15.72	35.02	37.15	98.22	99.64	107.35	15603	762	435
QBE680C	500 MCM CU	345	18.77	38.07	40.20	104.80	106.22	113.93	18558	813	535
<b>35kV 133% Copper Three Conductor</b>											
QC6680C	1/0 AWG CU	420	8.59	31.60	33.74	90.83	92.25	99.96	11298	712	215
QC9680C	2/0 AWG CU	420	9.60	32.62	34.75	93.03	94.45	102.16	11985	737	245
QCA680C	3/0 AWG CU	420	10.82	33.84	35.97	95.66	97.08	104.79	12902	737	285
QCB680C	4/0 AWG CU	420	12.14	35.16	37.29	98.51	99.94	107.65	13909	762	325
QCC680C	250 MCM CU	420	13.28	36.55	38.69	101.53	102.95	110.66	14883	788	360

**PRODUCT NOTES:**

The above dimensions are approximate and subject to normal manufacturing tolerances. All metric (SI) dimensions are derived from a soft conversion.

†Ampacities are based on the following:

Isolated In Air or Uncovered Cable Tray: Three-conductor cable, spaced one cable diameter (minimum), 90°C conductor temperature, and 40°C ambient temperature, and shields short-circuited.

Inner jacket diameter is measured over the ribs.