

Photovoltaic Cable EPCV Insulated

600 V, 1000 V or 2000 V

CME[®]
wire and cable

A Viakable Company

Features

Rated and listed as PV Wire per UL.

Also listed as Type USE-2 and RHH / RHW-2.

All sizes are rated VW-1, -40 °C and Direct Burial.

Rated Sun Resistance black color only, and CT Use, 1/0 AWG and larger.

Meets FT4 Flame Test per IEEE-1202, 1/0 AWG and larger.

18 and 16 AWG rated as PV only.

Application

For interconnection wiring of grounded and ungrounded photovoltaic power systems as described in Wiring Systems, Article 690, and other applicable parts of the National Electrical Code (NEC), NFPA 70.

Standards

UL Subject 4703

Outline of Investigation for Photovoltaic Wire.

UL 854

Service Entrance Cables.

UL 44

Rubber-Insulated Wires and Cables, for cables rated RHW-2 or RHH.

ICEA S-95-658/NEMA WC70

Nonshielded 0-2 kV Cables.

Specifications

Maximum operating voltage:

- 600 V, 1000 V or 2000 V
USE-2 is rated 600V

Maximum conductor operation temperatures:

- 90 °C wet and dry

Engineering Information

1. Conductor: Soft annealed uncoated copper Class B compressed or unilay compressed per ASTM B8

or Aluminum AA-8000 alloy compacted conductor, Class B stranding, per ASTM B801.

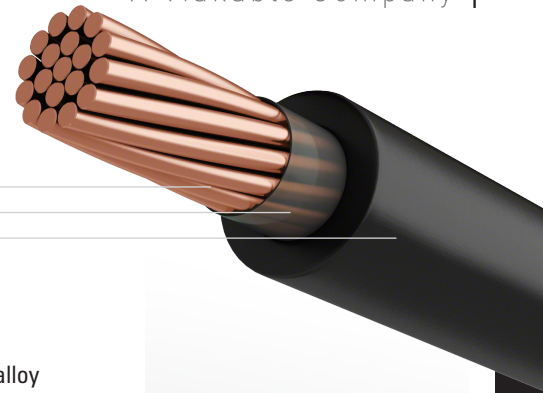
On request, flexible or other strandings available.

Sizes: 18 AWG (6 AWG Aluminum) – 1000 kcmil.

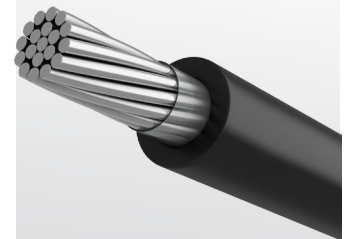
2. Binder Tape: A suitable opaque tape, as required

3. Insulation: Black thermoset flame retardant Cross-Linkable Synthetic-Polymer (Class XL) Compound.

Markings: CME WIRE AND CABLE – PV WIRE – SIZE -90 °C W&D – VOLTS – SUN RES – -40 °C – VW-1 – DIRECT BURIAL – (AL) when applicable.



COPPER
CONDUCTOR



ALUMINUM
CONDUCTOR

Technical Data

Copper EPCV Insulated, 600 V

Size AWG	Number of Strands	Insulation Thickness	Approximate Outside Diameter	Approximate Net Weight
		mil	in	lb/kft
18	7	60	0.17	18
16	7	60	0.18	22
14	7	60	0.20	28
12	7	60	0.22	38
10	7	60	0.24	53
8	7	75	0.30	84
6	7	75	0.34	120
4	7	75	0.38	176
2	7	75	0.44	262
1	19	95	0.53	340
1/0	19	95	0.57	415
2/0	19	95	0.61	509
3/0	19	95	0.66	627
4/0	19	95	0.72	773
250	37	110	0.79	924
300	37	110	0.85	1091
350	37	110	0.90	1103
400	37	110	0.94	1114
450	37	110	0.99	1125
500	37	110	1.03	1135
600	61	125	1.13	1186
750	61	125	1.24	1215
1000	61	125	1.39	1258

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

Copper EPCV Insulated, 1000 V / 2000 V

Size AWG	Number of Strands	Insulation Thickness	Approximate Outside Diameter	Approximate Net Weight
		mil	in	lb/kft
18	7	75	0.20	23
16	7	75	0.22	28
14	7	75	0.23	34
12	7	75	0.25	45
10	7	75	0.27	60
8	7	85	0.32	90
6	7	85	0.36	127
4	7	85	0.40	183
2	7	85	0.46	271
1	19	105	0.55	350
1/0	19	105	0.59	426
2/0	19	105	0.63	521
3/0	19	105	0.68	639
4/0	19	105	0.74	787
250	37	120	0.82	939
300	37	120	0.87	1107
350	37	120	0.92	1120
400	37	120	0.96	1132
450	37	120	1.01	1143
500	37	120	1.05	1154
600	61	135	1.15	1208
750	61	135	1.26	1239
1000	61	135	1.41	1285

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

Technical Data *continued*

Aluminum 8000 EPCV Insulated, 600 V

Size AWG	Number of Strands	Insulation Thickness	Approximate Outside Diameter	Approximate Net Weight
		mil	in	lb/kft
6	7	75	0.33	62
4	7	75	0.37	84
2	7	75	0.43	117
1	19	95	0.50	155
1/0	19	95	0.54	183
2/0	19	95	0.58	217
3/0	19	95	0.63	259
4/0	19	95	0.68	311
250	37	110	0.76	377
300	37	110	0.81	436
350	37	110	0.85	494
400	37	110	0.90	551
450	37	110	0.94	608
500	37	110	0.97	664
600	61	125	1.08	808
750	61	125	1.18	975
1000	61	125	1.33	1253

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

Aluminum 8000 EPCV Insulated, 1000 V / 2000 V

Size AWG	Number of Strands	Insulation Thickness	Approximate Outside Diameter	Approximate Net Weight
		mil	in	lb/kft
6	7	85	0.35	68
4	7	85	0.39	91
2	7	85	0.45	125
1	19	105	0.52	165
1/0	19	105	0.56	193
2/0	19	105	0.60	228
3/0	19	105	0.65	271
4/0	19	105	0.70	324
250	37	120	0.78	392
300	37	120	0.83	463
350	37	120	0.87	511
400	37	120	0.92	569
450	37	120	0.96	626
500	37	120	0.99	683
600	61	135	1.10	828
750	61	135	1.20	998
1000	61	135	1.35	1279

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

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