



Philatron Wire & Cable

EV CABLE



*Catalog of UL Listed EV Cables
for Electric Vehicles and EV Charging Stations*



*Helping the world take charge,
one vehicle at a time....*

Philatron Wire and Cable
15315 Cornet St
Santa Fe Springs, CA 90670
800-967-9147 toll free
www.philatron.com ~ www.evcable.com



IMPORTANT FORWARD

To comply with the safety code of the National Electrical Code (NEC) of the National Fire Protection Association - cables for charging on board electrical vehicles and on board electrical vehicle charging stations shall be UL listed cable types and meet NEC Articles 400 and 625 as follows:

National Electrical Code (NEC) Article 625 Electric Vehicle Charging System 625.17 – Cable

The electric vehicle supply equipment cable shall be Type EV, EVJ, EVE, EVJE, EVT, OR EVJT flexible cable as specified in Article 400 and Table 400.4. Ampacities shall be as specified in Table 400.5(A) for 10 AWG and smaller, and in Table 400.5(B) for 8 AWG and larger. The overall length of the cable shall not exceed 7.5 m (25 feet) unless equipped with a cable management system that is listed as suitable for the purpose. Other cable types and assemblies listed as being suitable for the purpose, including option hybrid communications, signal, and optical fiber cables, shall be permitted.

**Know that All Products Listed in this Catalog are UL
Listed and Comply with the NEC.**

Philatron Wire and Cable

Philatron Wire & Cable

EV Cable Products Table of Contents

Page	Description
Forward	About National Electrical Code & UL
1	UL Type EVE Cable - No Control Wires
2	UL Type EVE Cable - With 2 Control Wires
3	UL Type EVE Cable - With Braid Shield
4	MTW Wire & Cable
5	Charging Station Wire & Cable
6	Coiled Extension Cords
7	Custom Coiled Cord/Cable Form

IMPORTANT FORWARD

To comply with the safety code of the National Electrical Code (NEC) of the National Fire Protection Association - cables for charging on board electrical vehicles and on board electrical vehicle charging stations shall be UL listed cable types and meet NEC Articles 400 and 625 as follows:

National Electrical Code (NEC) Article 625 Electric Vehicle Charging System 625.17 – Cable

The electric vehicle supply equipment cable shall be Type EV, EVJ, EVE, EVJE, EVT, OR EVJT flexible cable as specified in Article 400 and Table 400.4. Ampacities shall be as specified in Table 400.5(A) for 10 AWG and smaller, and in Table 400.5(B) for 8 AWG and larger. The overall length of the cable shall not exceed 7.5 m (25 feet) unless equipped with a cable management system that is listed as suitable for the purpose. Other cable types and assemblies listed as being suitable for the purpose, including option hybrid communications, signal, and optical fiber cables, shall be permitted.

**Know that All Products Listed in this Catalog are UL
Listed and Comply with the NEC.**

Philatron Wire and Cable

PHILATRON

Type EVE - 600 Volt Power

+105°C to -50°C

2 Conductors + Grd & 2 Control Conductors



Application: Extra heavy duty service - outdoors or indoors

Features: Greater mechanical strength, lighter weight, and resistance to low temperatures, heat aging, abrasion, chemicals, flame, oil, ozone, and water.

Standards: Underwriters Laboratories: UL-62 and National Electrical Code: Articles 400 & 625

Temp.: Temperature rating is from +105°C to -50°C

Branding: PHILATRON EV Cable 3 Conductors (size)AWG (UL) 600 Volts +105°C Dry / +60°C Wet

Color: Black. Other colors available upon request.

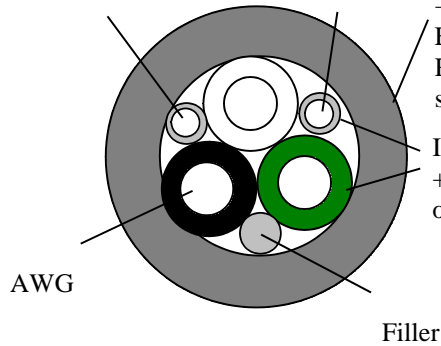
Color Code: black, white, & green

Control Conductors - 18AWG (16x30)

Jacket: Olefin Rubber - Philatron #RM24002
+105°C to -50°C

Extra Flexible - Extra Hard Service
Resistant to abrasion, flame, chemicals, oil, ozone, sunlight, & water.

Insulation: Olefin Rubber - Philatron #RM24004
+105°C to -60°C - Resistant to abrasion, chemicals oil, sunlight, & water.



Catalog Number	AWG Size	Number of Conductors	Bare Cu Stranding	Conductor *Ampacity	Nom. O.D. (Inches)	Approx. Lbs. M/ft
EVE183C	18	3	16 x 30	10	.357	76
EVE163C	16	3	26 x 30	13	.383	90
EVE143C	14	3	41x30	18	.520	142
EVE123C	12	3	65 x30	25	.591	188
EVE103C	10	3	104 x 30	30	.644	238
EVE083C	8	3	168 x 30	74	.859	380
EVE063C	6	3	266 x 30	99	.976	528
EVE043C	4	3	430 x 30	130	1.124	745
EVE023C	2	3	665 x 30	174	1.274	1039

*Ampacity ratings are based on copper conductor temperature at 90 degrees C and ambient temperature at 40 degrees C.

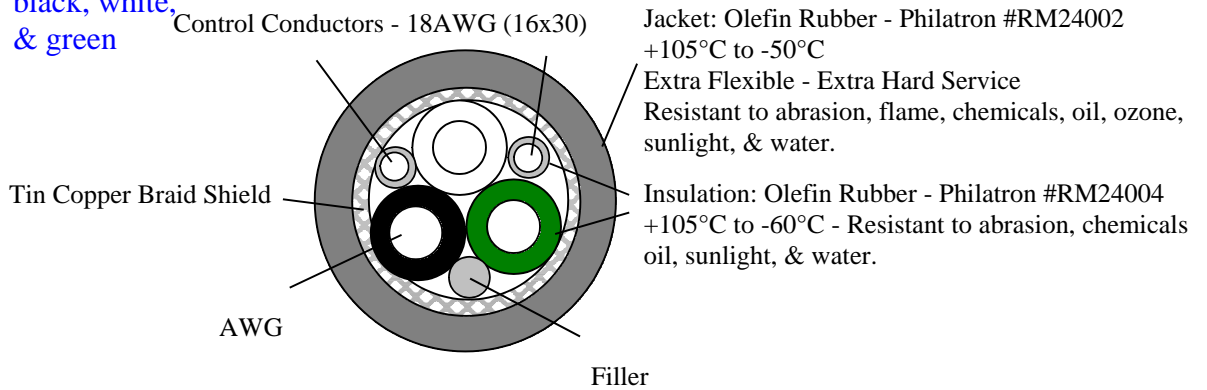
Industrial Cable Division--(800)483 1560 • Fax (562) 921 5770

PHILATRON

Type EVE - 600 Volt Power
+105°C to -50°C - Braid Shield
2 Conductors + Grd & 2 Control Conductors



Application: Extra heavy duty service - outdoors or indoors
Features: Greater mechanical strength, lighter weight, and resistance to low temperatures, heat aging, abrasion, chemicals, flame, oil, ozone, and water.
Standards: Underwriters Laboratories: UL-62 and National Electrical Code: Articles 400 & 625
Temp.: Temperature rating is from +105°C to -50°C
Branding: PHILATRON EVE Cable 3 Conductors (size)AWG (UL) 600 Volts +105°C Dry / +60°C Wet
Color: Black. Other colors available upon request.
Color Code: black, white, & green



Catalog Number	AWG Size	Number of Conductors	Bare Cu Stranding	Conductor *Ampacity	Nom. O.D. (Inches)	Approx. Lbs. M/ft
EVE183CS	18	3	16 x 30	10	.357	76
EVE163CS	16	3	26 x 30	13	.383	90
EVE143CS	14	3	41x30	18	.520	142
EVE123CS	12	3	65 x30	25	.591	188
EVE103CS	10	3	104 x 30	30	.644	238
EVE083CS	8	3	168 x 30	74	.859	380
EVE063CS	6	3	266 x 30	99	.976	528
EVE043CS	4	3	430 x 30	130	1.124	745
EVE023CS	2	3	665 x 30	174	1.274	1039

*Ampacity ratings are based on copper conductor temperature at 90 degrees C and ambient temperature at 40 degrees C.

Industrial Cable Division--(800)483 1560 • Fax (562) 921 5770

PHILATRON

UL Listed MTW Wire & Cable



Applications: EV battery cables & primary wire, wiring of charging stations, machinery, and motor & transformer lead.

- Flexible **PHILAFLEX** PVC
- UL, CSA, & NEC - 600 Volts
- UL +105°C AWM/MTW & SCT
- NEC & UL 90°C THW
- Complies with CSA - TEW

- Flexible K Class Stranding
- Heat & Flame Resistant
- Suitable for Direct Burial
- Abrasion & Crush resistant
- Oil & Water Resistant

Indent Legend:

PHILATRON (size) AWG (UL) (CSA) Building THW -90°C, Applcance AWM -MTW -TEW-105°C, & Stage Lighting SCT - 105°C Abrasion, Oil, & Water Resistant - 600 Volt

PART NUMBERS:

Part No.	Size (AWG)	K Strands 30AWG	Insulation Wall (Inch)	Nominal O.D. (Inch)	Weight/ 1000 Ft. (Lbs.)
MTW14	14	41	.030	.133	20
MTW12	12	65	.030	.155	29
MTW10	10	104	.030	.176	44
MTW08	8	168	.045	.247	76
MTW06	6	266	.060	.322	123
MTW04	4	420	.060	.392	184
MTW02	2	665	.060	.458	277
MTW01	1	836	.080	.557	366
MTW010	1/0	1,064	.080	.611	452
MTW020	2/0	1,330	.080	.644	563
MTW030	3/0	1,666	.080	.693	679
MTW040	4/0	2,107	.080	.787	847
MTW250	250	2,499	.095	.872	1,018
MTW500	500	5,054	.095	1.178	1,978
MTW750	750	7,581	.110	1.496	2,965
MTW1000	1000	10,101	.110	1.639	3,878

Philatron Wire & Cable

Charging Station Wire



- UL Listed and NEC Compliant.
- High Quality Crosslinked Polyethylene (XLPE) Insulation.
- Carry A Unique **Multi- UL Rating: Types: XHHW2 , SIS, & RHW2**
- Available in Solid, Medium & Extra Flexible Copper Stranding.
- Abrasion, Oil, Flame, Heat, Ozone, Water, & Sun Resistant.
- 600 Volts - 90°C Dry - 75°C Wet - Indoors or Outdoors.
- Complies with applicable National Electrical Code (NEC):

As type XHHW2 for Raceways, Underground Ducts, & Aerial Installations.

As type SIS for Switchboards, Panel Boards, Instrument & Control Wiring.

As type RHW2 for Direct Burial and Entrance Installations.



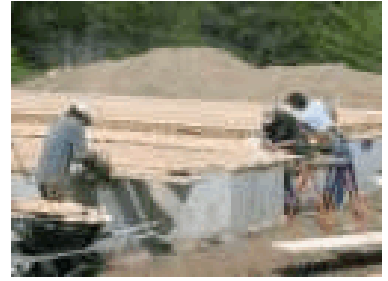
Part No.	Size	Strands	Ins. Wall Mils	OD Inch	** Amps	Lbs Mft	UL Listed XHHW2	UL Listed SIS	UL Listed RHW2
S1401-#	14	Solid	.030	.130	15	17	Yes	Yes	No
S1407-#	14	7x.0242	.030	.140	15	18	Yes	Yes	No
S1441-#	14	41x30ga	.030	.144	15	20	Yes	Yes	No
S1201-#	12	Solid	.030	.150	20	25	Yes	Yes	No
S1207- #	12	7x.0305	.030	.150	20	26	Yes	Yes	No
S1265- #	12	65x30ga	.030	.167	20	31	Yes	Yes	No
S1001- #	10	Solid	.030	.170	30	38	Yes	Yes	No
S1007-#	10	7x.0385	.030	.180	30	40	Yes	Yes	No
S101040- #	10	104x30ga	.030	.184	30	42	Yes	Yes	No
SR1019-#	10	19x.0234	.045	.203	30	43	Yes	Yes	Yes
S0807-#	8	7x.0486	.045	.240	55	75	Yes	Yes	No
S08168-#	8	168 7x24/30ga	.045	.268	55	76	Yes	Yes	No
SR0819-#	8	19x.0295	.060	.262	55	76	Yes	Yes	Yes
S0607-#	6	7x.0612	.045	.280	75	100	Yes	Yes	No
S06269-#	6	259 7x37/30ga	.045	.300	75	103	Yes	Yes	No
SR0619-#	6	19x.0372	.060	.300	75	104	Yes	Yes	Yes
S0407-#	4	7x.0772	.045	.320	95	150	Yes	Yes	No
S04413-#	4	413 7x59/30ga	.045	.356	95	152	Yes	Yes	No
SR0419-#	4	19x.0469	.060	.346	95	152	Yes	Yes	Yes
SR02133-#	2	133 19x7/0223	.060	.455	130	237	Yes	Yes	Yes
SR01133-#	1	133 19x7/0251	.080	.537	150	308	Yes	Yes	Yes
SR0133-#	1/0	133 19x7/0282	.080	.583	170	381	Yes	Yes	Yes
SR00259-#	2/0	259 7x37/0227	.080	.637	195	472	Yes	Yes	Yes
SR000133-#	3/0	133 19x7/0355	.080	.694	225	586	Yes	Yes	Yes
SR0000133-#	4/0	133 19x7/0399	.080	.759	260	730	Yes	Yes	Yes

To specify color add # to end of part number: Black-1, White-2, Red-3, Green-4, Orange-5, Blue-6, Yellow-7.

**Amps are based on the NEC Table 310.16 for 90°C (194°F) rated conductors at ambient temperature of 30°C(86°F).

PHILATRON X-CORD™

EXTENSION CORDS



The Best Extension Cords In The World!

● *X-tra Safe!*

No more danger of cutting cords when using cutting and turning tools.

● *X-pedient!*

No more wasted time with winding and unwinding cords.

● *X-ceptional!*

Withstands oil and freezing weather to -65°F below zero. UL and CSA approved.

● *X-pansive!*

Just two feet retracted - yet extends 20 to 25 feet! Neatly stores in tool chest.

● *X-cellent coil memory!*

Soft pull prevents pull-out from socket - yet returns to original coiled size.

● *X-clusively Made in the USA!*



Part Number	Size AWG	Retracted Length	Working Length	Service	Weight
ESJEO16325	16	2 Feet	25 Feet	10 Amps/1625W	2.25 lbs.
ESJEO14325	14	2 Feet	25 Feet	13 Amps/1875W	2.85 lbs.
ESJEO12325	12	2 Feet	25 Feet	15 Amps/1875W	3.60 lbs.



PHILATRON INTERNATIONAL

USA Manufacturer of High Quality Electrical Cables & Hoses * ISO 9002 & QS 9000 Certified
15315 Cornet Avenue Santa Fe Springs, California 90670 (562) 802 2570
Toll Free (800) 421 3547 Fax (562) 802 0264 Web Site: www.philatron.com

World's Leading Manufacturer of Custom Coiled Cords & Cables

Custom Coil Manufacturing Request Form

Name: _____ Title: _____
Company: _____ Phone: _____
Email: _____ FAX: _____ Date: _____

Please FAX this COMPLETED form to PHILATRON (562) 921 5770

DIMENSIONAL REQUIREMENTS (specify ft. or in.)

1. Extended working length of coiled section, not including leads at ends:	2. Retracted Length (See C): <input type="checkbox"/> Not critical; make most economically. Minimum Retracted Length: _____ Maximum Retracted Length: _____
3. Coil Diameter (See B) <input type="checkbox"/> Not critical; make most economically. <i>(Note: the larger the coil diameter, the lower the pull force.)</i> Maximum coil diameter: _____	
4. Cable Diameter (See D) <input type="checkbox"/> Not critical; make most economically. Minimum Diameter: _____ Maximum Diameter: _____	
5. Lead Type Left <input type="checkbox"/> Right Angle <input type="checkbox"/> Axial(costs more)	6. Lead Type Right <input type="checkbox"/> Right Angle <input type="checkbox"/> Axial(costs more)
7. Lead Length (See A and E) Left Side _____ Right Side _____	8. Jacket Stripping None, cut blunt <input type="checkbox"/> Jacket Only <input type="checkbox"/> Left Side A: _____ Right Side: E: _____

FUNCTIONAL REQUIREMENTS

9. What is your application?	10. Copper gauge size(s): a. Gauge _____ No. of conductors: _____ Colors: _____ b. Gauge _____ No. of conductors: _____ Colors: _____ c. Gauge _____ No. of conductors: _____ Colors: _____
11. Voltage: _____ Amperage: _____	12. Copper: <input type="checkbox"/> Bare <input type="checkbox"/> Tinned (for soldering)
13. RFI/EMI shielding required? (See E) <input type="checkbox"/> Yes <input type="checkbox"/> No	14. Jacket Color: _____
15. Environment: <input type="checkbox"/> Outdoors <input type="checkbox"/> Indoors	16. Temperature: <input type="checkbox"/> Not Critical <input type="checkbox"/> High-- <input type="checkbox"/> Low--
17. Does your cable require oil and chemical resistance? <input type="checkbox"/> Yes <input type="checkbox"/> No	18. Pull Force: <input type="checkbox"/> Soft memory (for manual exertion) <input type="checkbox"/> Strong memory (extra fast retraction)
19. Does your coil require great flexibility (which requires more expensive insulation), or will stiffer insulation suffice, with a larger coil diameter for easy pulling? <input type="checkbox"/> Very flexible <input type="checkbox"/> Stiffer	20. Does your cable have other unusual required properties?
21. Is this quotation requested for a coiled cable which you are presently using? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, may we have a sample?	22. Is a drawing/sample of your coiled cable available? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, may we have a copy?
23. Estimated usage Quantity: Monthly: _____ Yearly: _____	

Name of Your Philatron Contact: _____

EV Cable Catalog

Philatron Wire and Cable

15315 Cornet St ~ Santa Fe Springs, CA 90670

www.philatron.com

800-967-9147