

Super Vu-Tron® Welding Cable

90°C 600 Volt UL/CSA RHH/RHW

Product Construction:

Conductor:

- 6 through 4/0 AWG fully annealed stranded bare copper per ASTM B-172

Jacket:

- Super Vu-Tron®, Orange
- Temperature Range: -50°C to +90°C

Jacket Marking:

- #6 - #1 AWG: CAROL SUPER VU-TRON WELDING CABLE-EXTRA FLEXIBLE (UL) 600 VOLT (-50 to +90C) OIL RESISTANT P-123-141 MSHA (SIZE) --- CSA 90C ARC WELDING CABLE FT-1
- 1/0 - 4/0 AWG: CAROL SUPER VU-TRON WELDING CABLE (SIZE) EXTRA FLEXIBLE (UL) 600 VOLT (-50 to +90C) OIL RESISTANT P-123-141 MSHA --- CSA 90C ARC WELDING CABLE FT-1 --- TYPE RHH OR RHW (UL) 600V FOR CT USE.

Applications:

- Secondary voltage resistance welding leads
- Power supply applications not exceeding 600 Volt AC
- Sizes 1/0 and larger for permanent wiring in conduit or tray of 600V power supplies, hoists, cranes or other applications where flexible power leads must be installed in conduit, raceways or trays.

Features:

- UL Listed
- CSA Certified
- Excellent flexibility to last longer in flex applications
- Abrasion resistant
- Resists oils and solvents
- Rated -50°C for use in cold environments
- Weather resistant
- Ozone resistant
- Safety colored for high visibility
- Assured longer service life, saving money in replacement costs, maintenance cost and downtime
- MSHA approved for flame resistance

Industry Approvals:

- UL Listed
- CSA Certified
- MSHA Approved
- Meets UL Vertical Flame Test per UL 854

Packaging:

- 250' (76.2 m), 500' (152.4 m), and 1000' (304.8 m) reels
- Other put-ups available on special order

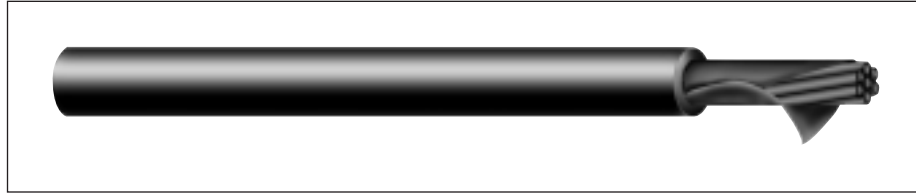
**Suggested Ampacities:
For 600 Volt In-Line Applications**

AWG	AMPERES	AWG	AMPERES
4/0	405	1	220
3/0	350	2	190
2/0	300	4	140
1/0	260	6	105

Per Standards: ICEA S-19-81NEMA WC-3 Part 8, Appendix J

Ampacities for portable cable in accordance with NEC Table 400.5(B).

May not be suitable for all installations per National Electrical Code®.



SUPER VU-TRON® WELDING CABLE – UL/CSA – CLASS M – 34 AWG STRANDING

CATALOG NUMBER	AWG SIZE	CONDUCTOR STRAND	NOMINAL. O.D.		APPROX. NET WEIGHT LBS/M ^(S)	STD. CTN.
			INCHES	mm		
01768	6	660/34	0.370	9.40	125	250'
01767	4	1045/34	0.420	10.67	190	250'
01766	2	1650/34	0.475	12.06	260	250'
01765	1	2090/34	0.525	13.33	325	250'
01764	1/0	2640/34	0.610	15.49	410	250'
01763	2/0	3300/34	0.635	16.13	495	250'
01762	3/0	4180/34	0.700	17.78	620	250'
01761	4/0	5225/34	0.800	20.32	795	250'

^(S) Actual shipping weight may vary.

WELDING CABLE AMPACITIES SINGLE CONDUCTOR

Required Cable Sizes: For Welding Cable Application

AMPS	length in feet for total circuit for secondary voltages only – do not use this table for 600 Volt in-line applications						
	100'	150'	200'	250'	300'	350'	400'
100	4	4	2	2	1	1/0	1/0
150	4	2	1	1/0	2/0	3/0	3/0
200	2	1	1/0	2/0	3/0	4/0	4/0
250	1	1/0	2/0	3/0	4/0		
300	1/0	2/0	3/0	4/0			
350	1/0	3/0	4/0				
400	2/0	3/0					
450	2/0	4/0					
500	3/0	4/0					
550	3/0	4/0					
600	4/0						

REQUIRED CABLE SIZES SHOWN IN AWG NUMBERS

The total circuit length includes both welding and ground leads (Based on 4-Volt drop) 60% duty cycle.

These values for current-carrying capacity are based on a copper temperature of 60°C (140°F), an ambient temperature of 40°C (104°F), and yield load factors of from approximately 32% for the No. 2 AWG cable to approximately 23% for the No. 3/0 AWG cable, and higher for the smaller sizes. The sizes of cables generally used range from No. 2 AWG to No. 3/0 AWG. In actual service, the load factor may be much higher than indicated without overheating the cable as the ambient temperature will generally be substantially lower than 40°C.





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WE GET IT
 24/7 Emergency Material Access

Super Vu-Tron[®] Supreme Types SJOOW/SOOW

105°C 300 and 600 Volt UL/CSA Portable Cord



Product Construction:

Conductors:

- 18 through 10 AWG fully annealed stranded tinned copper per ASTM B-174

Insulation:

- Premium-grade, color-coded, oil-resistant 105°C EPDM
- European color code: See chart below

Jacket:

- Super Vu-Tron[®] Supreme, yellow
- Temperature range: -50°C to +105°C UL/CSA
- Voltage rating: 300 volts Type SJOOW
600 volts Type SOOW

Jacket Marking:

- CAROL SUPER VU-TRON[®] SUPREME (SIZE) (mm²) 105°C (UL) WATER RESISTANT SJOOW (OR SOOW) CSA -50°C FT-1 --- P-123-103 MSHA (VOLTS) RoHS MADE IN USA

Applications:

- Machine tools
- Power tools
- Dockside power applications
- Motor leads
- Portable machinery
- Cranes
- Submersible pumps
- Where water immersion is required
- Severe environment OEM/MRO applications

Features:

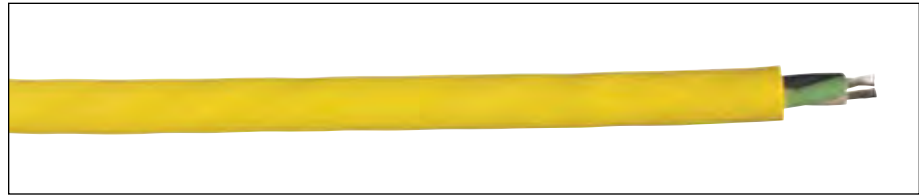
- Excellent flexibility in cold temperatures
- Lasts longer in flex applications (Class M stranding)
- Integral Flexfill[®]
- Ozone-sunlight (UV)- and weather-resistant
- UL Listed and CSA Certified for indoor and outdoor use
- Water-resistant
- Safety-colored, with high-visibility yellow jacket
- High heat and flame resistance
- Resistant to sunlight, oils, acids and chemicals
- Excellent abrasion and cut resistance
- TRU-Mark[®] sequential footage marking
- Tinned copper conductors — corrosion/oxidation-resistant

Industry Approvals:

- UL Flexible Cord - UL Subject 62
- CSA Flexible Cord - C22.2-49
- MSHA Approved
- OSHA Acceptable
- JC580
- RoHS Compliant

Packaging:

- 250' (76.2 m), 500' (152.4 m), 1000' (304.8 m)
- Other put-ups available on special order



TYPE SJOOW – 300 VOLT – UL/CSA

CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	STRAND O.D.	NOM. INS. THICKNESS		JACKET NOMINAL O.D.		CURRENT AMPS [†]	APPROX. NET WT. LBS/M' ^(S)	COPPER WT. LBS/M'	STD. CTN.
					INCHES	mm	INCHES	mm				
02601	2	18	41/34	.048"	0.030	0.76	0.310	7.87	10	60	10	1000'
02602	3	18	41/34	.048"	0.030	0.76	0.320	8.13	10	70	15	1000'
02603	4	18	41/34	.048"	0.030	0.76	0.345	8.76	7	85	20	250'
02604	2	16	65/34	.061"	0.030	0.76	0.315	8.00	13	67	16	1000'
02605	3	16	65/34	.061"	0.030	0.76	0.335	8.51	13	83	24	250'
02606	4	16	65/34	.061"	0.030	0.76	0.370	9.40	10	100	32	250'
02607	2	14	105/34	.078"	0.030	0.76	0.370	9.40	18	90	26	250'
02608	3	14	105/34	.078"	0.030	0.76	0.375	9.53	18	114	41	250'
02609	4	14	105/34	.078"	0.030	0.76	0.405	10.29	15	132	55	250'

TYPE SOOW – 600 VOLT – UL/CSA

CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INS. THICKNESS		JACKET NOMINAL O.D.		CURRENT AMPS [†]	APPROX. NET WT. LBS/M' ^(S)	COPPER WT. LBS/M'	STD. CTN.
				INCHES	mm	INCHES	mm				
02631*	2	18	41/34	0.030	0.76	0.365	9.27	10	75	10	250'
02632	3	18	41/34	0.030	0.76	0.375	9.53	10	84	15	250'
02633*	4	18	41/34	0.030	0.76	0.400	10.16	7	110	21	250'
02634	2	16	65/34	0.030	0.76	0.370	9.40	13	86	16	250'
02635	3	16	65/34	0.030	0.76	0.395	10.03	13	105	24	250'
02636	4	16	65/34	0.030	0.76	0.425	10.80	10	127	32	250'
02621	5	16	65/34	0.030	0.76	0.515	13.08	8	181	40	250'
02637*	2	14	105/34	0.045	1.14	0.510	12.95	18	155	26	250'
02638	3	14	105/34	0.045	1.14	0.525	13.34	18	176	41	250'
02639	4	14	105/34	0.045	1.14	0.575	14.61	15	218	55	250'
02622*	5	14	105/34	0.045	1.14	0.675	17.15	12	285	66	250'
02641*	2	12	168/34	0.045	1.14	0.590	14.99	25	200	41	250'
02642	3	12	168/34	0.045	1.14	0.600	15.24	25	243	67	250'
02643	4	12	168/34	0.045	1.14	0.650	16.51	20	295	90	250'
02623*	5	12	168/34	0.045	1.14	0.730	18.54	16	315	103	250'
02645	3	10	259/34	0.045	1.14	0.660	16.76	30	299	99	250'
02646	4	10	259/34	0.045	1.14	0.710	18.03	25	413	132	250'
02624*	5	10	259/34	0.045	1.14	0.770	19.56	20	432	168	250'

TOP PERFORMANCE IN THE TOUGHEST ENVIRONMENTS

Volume change (%) of SUPER VU-TRON [®] SUPREME after 28 days at room temperature in the following materials			
ACETIC ACID (30%)	+19.00	LINSEED OIL	+1.04
AMMONIA HYDROXIDE	+3.12	LUBE OIL	-1.82
ASTM 3 OIL	+0.26	MILK	+4.16
BEER	+4.42	NITRIC ACID (10%)	+7.29
BLEACH WATER	+2.60	SAE 30 OIL	-1.30
BUTYL ALCOHOL	-1.82	SKYDROL 500	+17.10
CORN OIL	0.00	SODIUM HYDROXIDE	+10.90
FORMALDEHYDE	+3.38	SULFURIC ACID (10%)	+2.34
GLYCOL (ANTI-FREEZE)	-2.60	TOLUENE	+30.20
HYDROCHLORIC ACID (20%)	+10.60	UNLEADED GAS	+22.10
JP-4	+10.90	WATER	+2.86
KEROSENE	+10.60		

* Non-stock item; minimum quantity purchase required.

† Green conductor for grounding only. Ampacities based on NEC table 400.5(A).

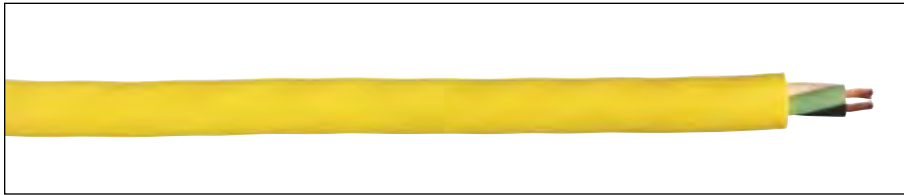
(S) Actual shipping weight may vary.

COLOR CODE CHART

NO. OF CONDUCTORS	COLOR
2	Black, White
3	Black, White, Green/Yellow
4	Black, White, Red, Green/Yellow
5	Black, White, Red, Orange, Green/Yellow

Super Vu-Tron® III Types SJOOW/SOOW

105°C 300 and 600 Volt UL/CSA Portable Cord



TYPE SJOOW – 300 VOLT – UL/CSA

CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOMINAL INS. THICKNESS		NOMINAL O.D.		CURRENT AMPS†	APPROX. NET WT. LBS/M ^(S)	STD. CTN.
				INCHES	mm	INCHES	mm			
02001*	2	18	41/34	0.030	0.76	0.310	8.00	10	56	1000'
02002*	3	18	41/34	0.030	0.76	0.320	8.12	10	65	1000'
02003*	4	18	41/34	0.030	0.76	0.345	8.76	7	80	250'
02004*	2	16	65/34	0.030	0.76	0.315	8.00	13	68	1000'
02005*	3	16	65/34	0.030	0.76	0.335	8.51	13	80	250'
02006*	4	16	65/34	0.030	0.76	0.370	9.40	10	95	250'
02007*	2	14	41/30	0.030	0.76	0.370	9.40	18	90	250'
02008*	3	14	41/30	0.030	0.76	0.375	9.52	18	110	250'
02009*	4	14	41/30	0.030	0.76	0.405	10.29	15	130	250'

TYPE SOOW – 600 VOLT – UL/CSA

CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOMINAL INS. THICKNESS		NOMINAL O.D.		CURRENT AMPS†	APPROX. NET WT. LBS/M ^(S)	STD. CTN.
				INCHES	mm	INCHES	mm			
02031*	2	18	41/34	0.030	0.76	0.365	9.27	10	75	250'
02032*	3	18	41/34	0.030	0.76	0.375	9.53	10	80	250'
02033*	4	18	41/34	0.030	0.76	0.400	10.16	7	110	250'
02034*	2	16	65/34	0.030	0.76	0.370	9.40	13	75	250'
02035*	3	16	65/34	0.030	0.76	0.395	10.80	13	100	250'
02036*	4	16	65/34	0.030	0.76	0.425	10.80	10	120	250'
02021*	5	16	65/34	0.030	0.76	0.515	13.08	8	150	250'
02037*	2	14	41/30	0.045	1.14	0.510	12.95	18	155	250'
02038*	3	14	41/30	0.045	1.14	0.525	13.34	18	165	250'
02039*	4	14	41/30	0.045	1.14	0.575	14.61	15	215	250'
02022*	5	14	41/30	0.045	1.14	0.675	17.15	12	285	250'
02041*	2	12	65/30	0.045	1.14	0.590	14.99	25	200	250'
02042*	3	12	65/30	0.045	1.14	0.600	15.24	25	250	250'
02043*	4	12	65/30	0.045	1.14	0.650	16.51	20	280	250'
02023*	5	12	65/30	0.045	1.14	0.730	18.54	16	315	250'
02045*	3	10	104/30	0.045	1.14	0.660	16.76	30	320	250'
02046*	4	10	104/30	0.045	1.14	0.710	18.03	25	375	250'
02024*	5	10	104/30	0.045	1.14	0.770	19.56	20	432	250'

* Non-stock item available by special order; minimum quantity purchase required.

† Green conductor for grounding only. Ampacities based on NEC table 400.5(A).

© Actual shipping weight may vary.

Product Construction:

Conductors:

- 18 through 10 AWG fully annealed stranded bare copper per ASTM B-174

Insulation:

- Premium-grade, color-coded, oil-resistant 105°C EPDM
- Color code: See chart below

Jacket:

- Super Vu-Tron® III, yellow
- Temperature range: -50°C to +105°C UL/CSA
- Voltage rating: 300 volts Type SJOOW, 600 volts Type SOOW

Jacket Marking:

- CAROL SUPER VU-TRON® III (SIZE) (mm²) 105°C (UL) WATER RESISTANT SJOOW (OR SOOW) CSA -50°C FT-1 --- P-123-103 MSHA (VOLTS) RoHS MADE IN USA

Applications:

- Machine tools
- Power tools
- Dockside power applications
- Motor leads
- Portable machinery
- Cranes
- Submersible pumps

Features:

- Excellent flexibility in cold temperatures
- Last longer in flex applications
- Integral Flexfill®
- Ozone-sunlight (UV)- and weather-resistant
- UL Listed and CSA Certified for indoor and outdoor use
- Water-resistant, sunlight (UV)- resistant
- Safety-colored
- High heat and flame resistance
- Resistant to oils, acids and chemicals
- Excellent abrasion and cut resistance

Industry Approvals:

- UL Flexible Cord - UL Subject 62
- CSA Flexible Cord - C22.2-49
- MSHA Approved
- RoHS Compliant

Packaging:

- 250' (76.2 m), 500' (152.4 m), 1000' (304.8 m)
- Other put-ups available on special order

COLOR CODE CHART

NO. OF CONDUCTORS	COLOR
2	Black, White
3	Black, White, Green
4	Black, White, Red, Green
5	Black, White, Red, Orange, Green



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