

# Carolprene® 90°C Welding Cable

## 600 Volt



**Product Construction:**

**Conductor:**

- 6 AWG through 500 kcmil fully annealed stranded bare copper Class K

**Jacket:**

- Premium-grade 90°C EPDM, black or red
- Temperature range: -40°C to +90°C

**Jacket Marking:**

- CAROLPRENE (SIZE) WELDING CABLE 600 VOLT MADE IN USA (TRU-MARK SEQUENTIAL FOOTAGE)

**Applications:**

- Secondary voltage resistance welding leads
- Power supply applications not exceeding 600 volts AC

**Features:**

- Good flexibility
- Abrasion-resistant
- Good color retention
- TRU-Mark® sequential footage marking

**Packaging:**

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

**Industry Approvals:**

- RoHS Compliant

**Suggested Ampacities**

**For 600 Volt In-Line Applications**

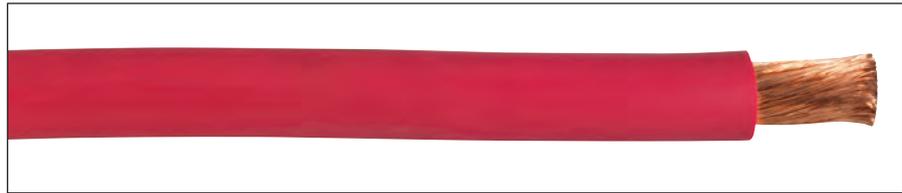
AWG OR kcmil	AMPERES	AWG	AMPERES
500 kcmil	695	1/0	190
350 kcmil	552	1	160
250 kcmil	445	2	140
4/0	310	4	100
3/0	265	6	75
2/0	223		

Ampacities for portable cable, continuous-duty (ambient temperature of 40°C). May not be suitable for all installations per National Electrical Code®.

**Ordering Part Number Example**

**01771.38.03**

4/0 500' put-up in red  
.03 for red jacket



**CAROLPRENE® WELDING CABLE – 600 VOLT – CLASS K – 30 AWG STRANDING**

CATALOG NUMBER	AWG OR kcmil	CONDUCTOR STRAND	NOMINAL O.D.		APPROX. NET WT. LBS/M <sup>(15)</sup>	STD. CTN.
			INCHES	mm		
01778	6	259/30	0.380	9.65	135	250'
01777	4	406/30	0.400	10.16	172	250'
01776	2	646/30	0.465	11.81	260	250'
01775	1	812/30	0.495	12.57	317	250'
01774	1/0	1025/30	0.560	14.22	400	250'
01773	2/0	1274/30	0.615	15.62	487	250'
01772	3/0	1613/30	0.670	17.02	605	250'
01771	4/0	2029/30	0.750	19.05	827	250'
99142*	250 kcmil	2496/30	0.830	21.08	976	250'
99432*	350 kcmil	3441/30	0.960	24.38	1338	250'
99202*	500 kcmil	5054/30	1.200	30.48	1995	250'

<sup>(15)</sup> Actual shipping weight may vary.  
\* Non-stock item; minimum quantity required.

# WELDING CABLE AMPACITIES

## SINGLE CONDUCTOR

Required Cable Sizes: For Welding Cable Application

length in feet for total circuit for secondary voltages only – do not use this table for 600 Volt in-line applications							
AMPS	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						

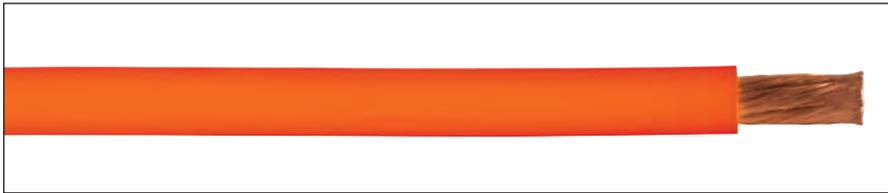
**REQUIRED CABLE SIZES SHOWN IN AWG NUMBERS**

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 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.

# Super Vu-Tron® Welding Cable

90°C, 600 Volt, UL/CSA, RHH/RHW



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

CATALOG NUMBER	AWG SIZE	CONDUCTOR STRAND	NOMINAL O.D.		APPROX. NET WT. LBS/M <sup>(S)</sup>	STD. CTN.
			INCHES	mm		
01768*	6	660/34	0.370	9.40	125	250'
01767*	4	1045/34	0.415	10.54	191	250'
01766	2	1634/34	0.475	12.07	259	250'
01765	1	2090/34	0.530	13.46	331	250'
01764†	1/0	2597/34	0.575	14.61	401	250'
01763†	2/0	3300/34	0.630	16.00	511	250'
01762†	3/0	4214/34	0.700	17.78	615	250'
01761†	4/0	5225/34	0.800	20.32	844	250'

\* Not MSHA Approved.  
 ® Actual shipping weight may vary.  
 † Type RHH/RHW - 600 V for CT use.

### Product Construction:

#### Conductor:

- 6 AWG through 4/0 AWG fully annealed stranded bare copper per ASTM B172 Class M

#### 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°C to +90°C) OIL RESISTANT P-123-141 MSHA (SIZE) --- CSA 90°C ARC WELDING CABLE FT1 MADE IN USA
- 1/0 - 4/0 AWG: CAROL SUPER VU-TRON® WELDING CABLE (SIZE) EXTRA FLEXIBLE (UL) 600 VOLT (-50°C to +90°C) OIL RESISTANT P-123-141 MSHA --- CSA 90°C ARC WELDING CABLE FT1 --- TYPE RHH OR RHW (UL) 600 V FOR CT USE MADE IN USA

### Applications:

- Secondary voltage resistance welding leads
- Power supply applications not exceeding 600 volts AC
- Sizes 1/0 and larger for permanent wiring in conduit or tray of 600 V 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
- Sunlight-resistant

### Industry Approvals:

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

### Packaging:

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

## 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.

### 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

Appendix J Ampacities for portable cable in accordance with NEC Table 400.5(A)(2). May not be suitable for all installations per National Electrical Code®.

