

# Carolprene® Welding Cable

90°C 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

**Applications:**

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

**Features:**

- Good flexibility
- Abrasion-resistant
- Good color retention

**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

**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>1(6)</sup>	STD. CTN.
			INCHES	mm		
01778	6	259/30	0.380	9.65	135	250'
01777	4	374/30	0.400	10.16	172	250'
01776	2	625/30	0.465	11.81	260	250'
01775	1	778/30	0.495	12.57	317	250'
01774	1/0	990/30	0.560	14.22	400	250'
01773	2/0	1248/30	0.615	15.62	487	250'
01772	3/0	1586/30	0.670	17.02	605	250'
01771	4/0	2054/30	0.750	19.05	827	250'
99142*	250 kcmil	2496/30	0.830	21.08	976	250'
99432*	350 kcmil	3432/30	0.960	24.38	1338	250'
99202*	500 kcmil	5054/30	1.200	30.48	1995	250'

© Actual shipping weight may vary.  
 \* Non-stock item, minimum quantity required.

**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

## 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 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.

