

Cord & Cordset

Carolprene[®] **105°C Welding Cable** 105°C, 600 Volt, MSHA Approved



Product Construction:

Conductors:

 6 AWG through 4/0 AWG fully annealed stranded bare copper

Jacket:

- Carolprene® 105°C, black
- Temperature range: -50°C to +105°C

Jacket Marking:

 CAROLPRENE (SIZE) AWG 105°C WELDING CABLE 600 VOLT P-07-KA100015-MSHA MADE IN USA (TRU-MARK SEQUENTIAL FOOTAGE)

Applications:

- Secondary voltage resistance welding leads in heavy duty or mining applications
- 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:

- Sunlight-resistantDesigned to withstand severe environmental
- conditionsWithstands exposure to oil, acids, alkalies, heat,
- flame, moisture and chemicals • Meets or exceeds flame test requirements of
- MSHA • TRU-Mark[®] marking system and indent printed
- MSHA number

Industry Approvals:

- MSHA Approved
- RoHS Compliant

Packaging:

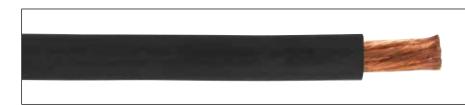
- 250' (76.2 m), 1000' (304.8 m) reels
- Other put-ups available on special order

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	

Ampacities for portable cable in accordance with NEC Table 400.5(A)(2).

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



CAROLPRENE® 105°C WELDING CABLE - 600 VOLT - 30 AWG STRANDING

CATALOG	AWG	NOMINAL	NOMIN	AL 0.D.	APPROX. NET WT.	STD. CTN.	
NUMBER	SIZE	STRAND	INCHES	mm	LBS/M ^(S)		
01758*	6	259/30	0.420	10.67	140	1000'	
01757*	4	416/30	0.475	12.07	200	1000'	
01756*	2	655/30	0.520	13.21	280	1000'	
01755*	1	827/30	0.575	14.61	350	1000'	
01754*	1/0	1042/30	0.600	15.24	415	1000'	
01753*	2/0	1316/30	0.645	16.38	510	1000'	
01752*	3/0	1660/30	0.715	18.16	620	1000'	
01751*	4/0	2062/30	0.765	19.43	760	1000'	

* Non-stock item; minimum quantity required.

(S) Actual shipping weight may vary.

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 SIZ	ZES SHOWN	I IN AWG N	UMBERS				

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.



RoHS Compliant



Carolprene® 105°C Welding Cable 600 Volt



NOW W



CAROLPRENE® 105°C WELDING CABLE - 600 VOLT - CLASS K - 30 AWG STRANDING APPROX. NOMINAL O.D. CATALOG AWG OR CONDUCTOR NET WT. STD. NUMBER STRAND INCHES LBS/M'(S) CTN. kcmil mm 01778 6 259/30 0.320 8.13 135 250' 01777 4 406/30 0.375 9.53 172 250' 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 1274/30 487 0.615 15.62 250' 01772 3/0 0.670 17.02 1613/30 605 250' 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 0.950 24.13 1338 250' 99202* 5054/30 1.200 30.48 1995 250' 500 kcmil

^(S) Actual shipping weight may vary.

* Non-stock item; minimum guantity 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		REQUIRE	O CABLE SI	ZES SHOWN	IN AWG N	UMBERS				

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.



Product Construction:

Conductor:

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

Jacket:

- Premium-grade 105°C EPDM, black or red
- Temperature range: -50°C to +105°C

Jacket Marking:

• CAROLPRENE® (SIZE) 105°C 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

FLEX-A-PRENE® WELDING CABLE

BULK CABLE



CONSTRUCTION:

Highly flexible annealed 30 gauge bare copper conductor, insulated with an EPDM jacket and paper separator. Operating temperatures range from -50°C to +105°C (-58°F to +221°F). Rated to 600 volts. Available in black, blue, green, red and yellow jacket colors. Also available on 250, 500, and 1,000 ft. reels. Coiled, boxed and shrink wrap packaging available for 25, 50 or 100 ft. lengths. Custom lengths also available upon request. **Custom indent or standard printing available. Inquire about custom colors.**

APPLICATION:

Flex-A-Prene welding cable is designed for all welding applications where a stinger/whip, leads and grounds are used.

GAUGE	STRANDING	O.D	AVG. WALL	WEIGHT/1,000 ft.
#8	168/30	.293	.060	81 lbs.
#6	260/30	.303	.060	109 lbs.
#4	364/30	.331	.060	145 lbs.
#2	624/30	.413	.060	235 lbs.
#1	767/30	.481	.080	301 lbs.
1/0	975/30	.526	.080	372 lbs.
2/0	1,196/30	.564	.080	446 lbs.
3/0	1,547/30	.621	.080	565 lbs.
4/0	1,950/30	.686	.080	700 lbs.
250mcm	2,527/30	.798	.095	925 lbs.
350mcm	3478/30	.918	.095	1,269 lbs.

SUGGESTED AMPACITY FOR WELDING CABLE DISTANCE MEASURED IN FEET*

Amps	5 0´	75 ´	100′	125´	150´	175´	200´	225′	250 ´	275'	30 0´	325'	3 50´
100	#4	#2	#2	#1	#1	1/0	2/0	2/0	3/0	3/0	3/0	4/0	4/0
150	#2	#2	#1	1/0	2/0	3/0	3/0	4/0	4/0	250mcm	250mcm	250mcm	350mcm
200	#2	#1	2/0	3/0	3/0	4/0	4/0	250mcm	350mcm	350mcm	350mcm	350mcm	
250	#1	1/0	3/0	4/0	4/0	250mcm	350mcm	350mcm	350mcm				
300	#1	2/0	3/0	4/0	250mcm	350mcm	350mcm	350mcm					
350	1/0	3/0	4/0	250mcm	350mcm	350mcm							
400	2/0	3/0	250mcm	350mcm	350mcm								
450	2/0	4/0	250mcm	350mcm	350mcm								
500	3/0	4/0	350mcm	350mcm									
550	4/0	250mcm	350mcm										
600	4/0	250mcm	350mcm										

This table is for reference only. There are variables in welding applications, therefore it is recommended the user consult an electrical engineeer for a particular welding application. *Distance from power source (per lead).

• Meets SAE J1127.

- Rugged jacket and highly flexible.
- Resists Abrasion, Cut, Tear, Flame, Grease, Oil and Water.
- National Electrical Code article 630 electric welders.
- RoHS Compliant.
- Available Colors include: Black, Blue, Green, Red, and Yellow.
- · Sequentially marked.
- Made in the USA.