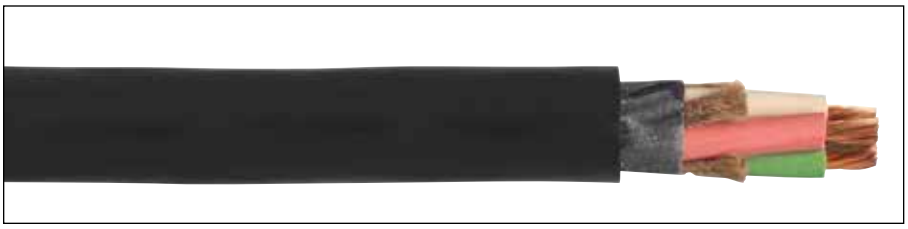
Industrial Cord



No longer are industrial cord products used only in coal mines and industrial plants; today typical applications include providing temporary power to job sites, as well as flexible power leads for installation in conduit.

General Cable's role, as the producer of the premiere Carol® Brand industrial cord products, is to ensure that new product development, product innovation and quality not only keep pace with industry requirements but also set the trends.

Our industrial cord products carry a full range of listings and certifications with Underwriters Laboratories, Inc. and the Canadian Standard Association. In addition, many products meet or exceed the requirements of UL, CSA, OSHA, MSHA, ICEA and other relevant industry standards.

Carol is simply the most accepted brand in the industry, having proven itself on the job time after time. Our industrial cord line is the most comprehensive in the industry, ensuring that the proper Carol product can always be specified.

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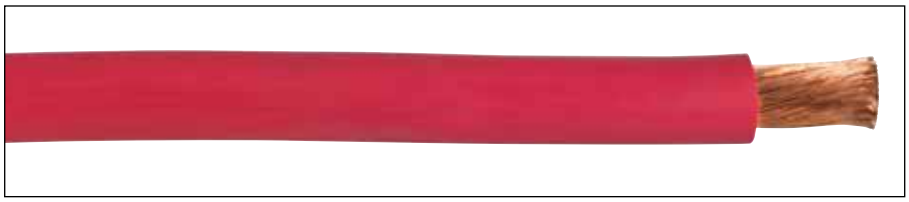
Carolprene® 105°C Welding Cable

600 Volt

NOW RATED FOR 105°C

NOW WITH TRU-Mark® Footage Marking System PRECISION



CAROLPRENE® 105°C WELDING CABLE – 600 VOLT – CLASS K – 30 AWG STRANDING

CATALOG NUMBER	AWG OR kcmil	CONDUCTOR STRAND	NOMINAL O.D.		APPROX. NET WT. LBS/M[(S)]	STD. CTN.
			INCHES	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	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	0.950	24.13	1338	250'
99202*	500 kcmil	5054/30	1.200	30.48	1995	250'

[(S)] Actual shipping weight may vary.
* Non-stock item; minimum quantity required.

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

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.

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

CAROL BRAND

RoHS Compliant Directive 2011/65/EU

Made in U.S.A.

General Cable

Installation — Training and Bending Limitations

Physical Limitations Training and Bending

Overview

Training is the positioning of cable when it is not under tension. Bending is the positioning of cable when it is under tension. When installing cable, the object is to limit the mechanical forces so that the cable's physical and electrical characteristics are maintained for the expected service life. Bends in conductors, multiconductor cables or assemblies of conductors shall be made so that the cable will not be damaged.

A nonshielded cable can tolerate a sharper bend than a shielded cable. This is especially true for cables having helically applied metallic shielding tapes which, when bent too sharply, can separate or buckle and cut into the insulation. Remember that offsets are bends.

The problem is compounded by the fact that most tapes are under jackets that conceal such damage. The extruded polymers used for insulation shields have sufficient conductivity and coverage initially to pass acceptance testing, then fail prematurely due to corona at the shield/insulation interface.

Minimum Bending Radius in Accordance with National Electric Code

Voltage	Conductors	Shielding	Cable Types	Minimum Bending Radius as a Multiple of Conductor/Assembly Diameter		
600 V	Single	Nonshielded	All	5X		
601-2000 V			All	8X		
600 V or 2000 V	Multiconductor or Multiplexed	Nonshielded	TC or TC-ER	1 in. (25 mm) or less	Over 1 in. to 2 in. (>25 mm to 50 mm)	Over 2 in. (>50 mm)
				4X	5X	6X
			MC[1]	7X		
		Shielded	All	12X		
			TC or TC-ER	12X		
			MC	12X/7X[1]		

[1] Per 330.24B Interlocked-Type Armor or Corrugated Sheath.

Cord Product Coding System

Cord Packaging and Color Codes

Example:

02725.41.01

Product Number

Packaging Code Identification Numbers

CODE	PACKAGING	CODE	PACKAGING
15/R5	250' Spool	41	1000' Reel
18/R8	500' Spool	43	2000' Reel
21	1000' Spool	44	2500' Reel
24	2500' Spool	46	5000' Reel
35	250' Reel	85	250' Coil
38	500' Reel	99	LL Reel
40	LL Reel	XX	Shorts

Jacket Color Code Identification Numbers

CODE	COLOR	CODE	COLOR
01	Black	07	Blue
02	White	08	Brown
03	Red	10	Gray
04	Orange	13	Pink
05	Yellow	19	Purple
06	Green	77	Light Blue

Extension Cord Facts

What does AWG mean?

AWG means American Wire Gauge. It designates the size of the copper wire. The standard sizes for extension cords are 16 AWG, 14 AWG, 12 AWG and 10 AWG. The smaller the AWG number, the larger the size of the copper wire and wattage rating.

What do the amp and watt ratings mean?

Never plug more than the specific number of watts into a cord. For example, could you plug a 150-watt lamp, a 60-watt lamp and a 10-amp appliance into an extension cord rated 13 amps/1625 watts?

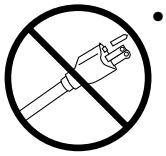
Use the Amp to Watt Conversion Table to determine the total number of watts to be used (150 watts + 60 watts + 1250 watts = 1460 watts). Therefore, it is safe to use the 13-amp/1625-watt extension cord.

Always look for the Underwriters Laboratory label which is permanently attached or molded into the cord. Read the label for instructions and electrical ratings.

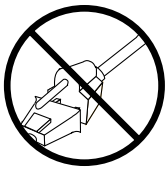
Amps To Watts (@ 125 V) Conversion Table		
0	=	0
1	=	125
2	=	250
3	=	375
4	=	500
5	=	625
6	=	750
7	=	875
8	=	1000
9	=	1125
10	=	1250
11	=	1375
12	=	1500
13	=	1625
14	=	1750
15	=	1875

How to use an extension cord properly.

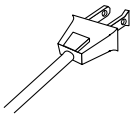
- Be sure the cord you have selected meets the intended use. Never use a cord outdoors that is not marked for outdoors.
- Inspect cord thoroughly before each use. Do not use if damaged.



- Do not remove, bend or modify any metal prongs or pins of plug.
- Look for the number of watts on appliances to be plugged into cord.
- Refer to UL Label on cord for specific wattage.
- Do not connect a three-prong plug into a two-hole cord.



- Do not plug more than the specified number of watts into a cord.
- Make sure appliance is off before connecting cord to outlet.



- A polarized plug has one blade wider than the other.
- Fully insert plug into outlet.
- Do not use excessive force to make connections.
- Do not run cords through doorways, holes in ceilings, walls or floors.
- Do not use an extension cord when wet.

- Keep extension cords away from water.
- Keep children and pets away from extension cords.

- Avoid overheating. Uncoil cord and do not cover it with any other material.
- Do not plug one extension cord into another.
- Do not drive, drag or place objects over extension cord.
- Always grasp plug when removing it from cord or outlet.
- Do not unplug by pulling on cord.

- Always store extension cords indoors.

- Do not walk on cord.
- Always unplug cord when not in use.
- Always look for the Underwriters Laboratory (UL) label which is permanently attached or molded into the cord. Read the label for instructions and electrical ratings.

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