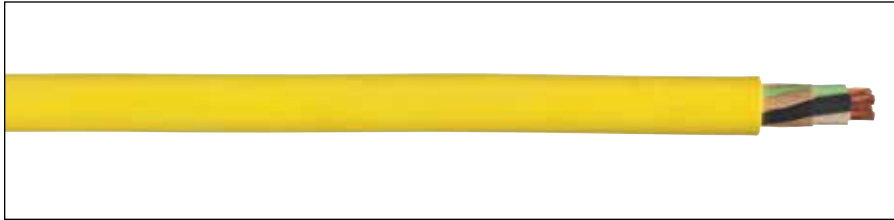


# Rubber Cord

2



Thermoset rubber cord products have evolved over the last 50 years from simple and unsophisticated to a product line where specialized, technologically advanced products are in demand for exacting commercial and industrial applications.

No longer are rubber cord products used only in applications where flexibility is needed; today typical applications require cord to perform well in environments of extreme heat and cold and on job sites and factory floors where resistance to oil, chemicals and abrasion is mandatory.

General Cable's role, as the producer of the premiere Carol® Brand rubber 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 rubber 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 OSHA, MSHA and other relevant industry standards.

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

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# Carolprene® Jacketed Types SOOW/SJOOW

90°C, 300 and 600 Volt, UL/CSA Portable Cord



## Product Construction:

### Conductors:

- 18 through 10 AWG fully annealed stranded bare copper

### Insulation:

- Premium-grade, color-coded 90°C EPDM
- Color code: See chart below

### Jacket:

- Yellow Carolprene®
- Temperature range: -40°C to +90°C

### Jacket Marking:

- CAROL (SIZE) (mm<sup>2</sup>) 90°C (UL) WATER RESISTANT SJOOW CSA (-40°C) FT2 P-7K-123033 MSHA 300 VOLT ROHS MADE IN USA (TRU-MARK SEQUENTIAL FOOTAGE)
- CAROL (SIZE) (mm<sup>2</sup>) 90°C (UL) WATER RESISTANT SOOW CSA (-40°C) FT2 P-7K-123033 MSHA 600 VOLT ROHS MADE IN USA (TRU-MARK SEQUENTIAL FOOTAGE)

## Applications:

- Portable tools and equipment
- Portable appliances
- Small motors and associated machinery
- Food processing plants and equipment
- Marinas/docks
- Shipyards
- OEM/MRO
- OSHA VPP safety
- Construction site power
- Industrial plants
- Mining

## Features:

- Excellent resistance to oil and moisture
- Good tensile strength, elongation and aging characteristics
- High flexibility
- Excellent abrasion resistance
- Water-resistant\*
- UL Listed and CSA Certified for indoor and outdoor use
- Ozone-, sunlight (UV)- and weather-resistant
- TRU-Mark® sequential footage marking

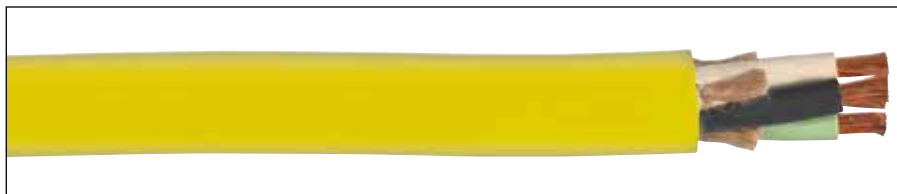
## Industry Approvals:

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

## Packaging:

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

\* Suitable for immersion in water if properly sealed and terminated.



### YELLOW HIGH-VISIBILITY – TYPE SJOOW – 300 VOLT – 90°C – 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			
01411	3	18	16/30	0.030	0.76	0.305	7.75	10	63	1000'
01444	4	18	16/30	0.030	0.76	0.330	8.38	7	76	250'
01442	3	16	26/30	0.030	0.76	0.330	8.38	13	76	250'
01443	4	16	26/30	0.030	0.76	0.365	9.27	10	95	250'
01460	3	14	41/30	0.030	0.76	0.370	9.40	18	106	250'
01464	4	14	41/30	0.030	0.76	0.410	10.41	15	121	250'
01480	3	12	65/30	0.030	0.76	0.430	10.92	25	146	250'
01481	4	12	65/30	0.030	0.76	0.475	12.07	20	185	250'
01483	3	10	104/30	0.045	1.14	0.580	14.73	30	242	250'
01484	4	10	104/30	0.045	1.14	0.655	16.64	25	304	250'

### YELLOW HIGH-VISIBILITY – TYPE SOOW – 600 VOLT – 90°C – 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			
02469	3	18	16/30	0.030	0.76	0.365	9.27	10	84	250'
02470	4	18	16/30	0.030	0.76	0.390	9.91	7	101	250'
02465	3	16	26/30	0.030	0.76	0.390	9.91	13	103	250'
02466	4	16	26/30	0.030	0.76	0.420	10.67	10	119	250'
02462	3	14	41/30	0.045	1.14	0.535	13.59	18	172	250'
02468	4	14	41/30	0.045	1.14	0.575	14.61	15	208	250'
02425	3	12	65/30	0.045	1.14	0.595	15.11	25	229	250'
02426	4	12	65/30	0.045	1.14	0.650	16.51	20	280	250'
02428	3	10	104/30	0.045	1.14	0.660	16.76	30	295	250'
02427	4	10	104/30	0.045	1.14	0.715	18.16	25	353	250'

Cord furnished with UL and CSA labels.

† Green conductor for grounding only. Ampacities based on NEC Table 400.5(A)(1).

(S) Actual shipping weight may vary.

## COLOR CODE CHART

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

# 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 <sup>1</sup>	7X		
		Shielded	All	12X		
			TC or TC-ER	12X		
			MC	12X/7X <sup>1</sup>		

<sup>1</sup> 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.

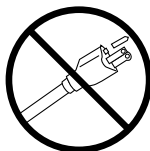


Amps To Watts (@ 125 V)  
Conversion Table

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

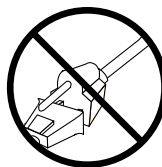
## How to use an extension cord properly.

- 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.

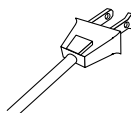


- Do not remove, bend or modify any metal prongs or pins of plug.

- 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.