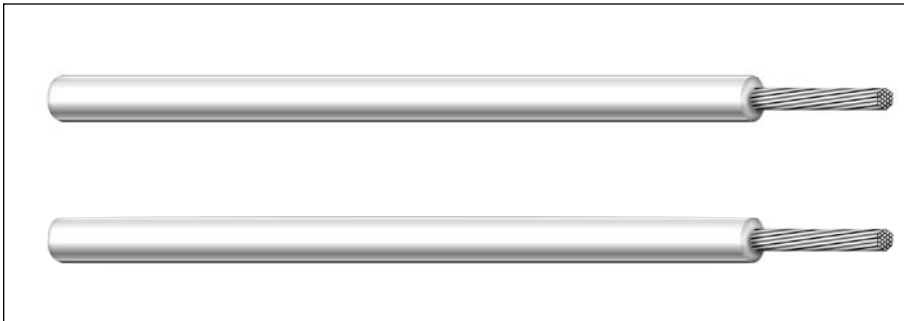


# Hook-Up Wire



Most applications of hook-up and lead wire for board-to-board or point-to-point wiring rely on PVC-insulated designs.

General Cable's Carol® Brand products offer both electrical and electronic designers a vast array of quality PVC hook-up wire to meet the specific technical demands of today, with "off-the-shelf" distributor inventoried products.

Hook-up wire is also available in special colors and/or stripe combinations with a minimum of lead time. In addition, General Cable offers a variety of put-ups to meet individual customer requirements.

Index	Page
UL 1007, UL 1569, CSA TR-64	2
UL 1015, CSA TEW	3
MIL-W-76B	4
UL Types MTW, TFF, AWM, CSA TEW	5
Heavy Wall UL Types MTW, AWM & NEC Type THW	6
Rubber/PVC Test Lead	7

# UL 1007, UL 1569, CSA TR-64

**Product Construction:**

**Conductor:**

- 24 thru 16 AWG
- Fully annealed tinned copper per ASTM B-33
- Solid or stranded

**Insulation:**

- Premium-grade, color-coded PVC
- Temperature Range: -20°C to +105°C
- Color Code: See chart below

**Applications:**

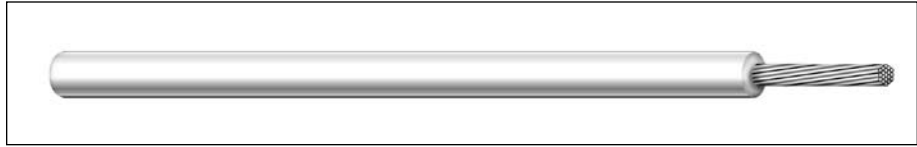
- Internal wiring of electrical and electronic equipment
- Internal wiring of panels and meters
- Point-to-point wiring
- Suggested voltage rating: 300 volts

**Compliances:**

- UL Style 1007 – 80°C, 300V
- UL Style 1569 – 105°C, 300V
- CSA TR-64 – 90°C, 300V
- RoHS Compliant Directive 2002/95/EC
- Designed to meet UL VW-1 Vertical Wire Flame Test

**Packaging:**

- Please contact Customer Service for packaging and color options



CATALOG NUMBER	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOMINAL O.D.	
			INCHES	mm	INCHES	mm

**SOLID CONDUCTORS**

<b>C2003A</b>	24	Solid	0.016	0.41	0.052	1.32
<b>C2004A</b>	22	Solid	0.016	0.41	0.057	1.45
<b>C2028A</b>	20	Solid	0.016	0.41	0.064	1.63
<b>C2052A</b>	18	Solid	0.016	0.41	0.072	1.83
<b>C2053A</b>	16	Solid	0.016	0.41	0.083	2.11

**STRANDED CONDUCTORS**

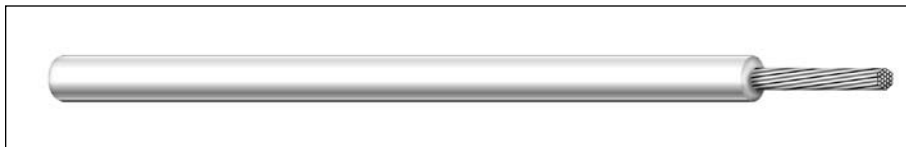
<b>C2015A</b>	24	7/32	0.016	0.41	0.056	1.42
<b>C2016A</b>	22	7/30	0.016	0.41	0.062	1.57
<b>C2040A</b>	20	10/30	0.016	0.41	0.070	1.78
<b>C2064A</b>	18	16/30	0.016	0.41	0.080	2.03
<b>C2065A</b>	16	26/30	0.016	0.41	0.092	2.34

**Color Code Chart**

ORDERING SUFFIX	COLORS	ORDERING SUFFIX	COLORS
<b>01</b>	Black	<b>06</b>	Green
<b>02</b>	White	<b>07</b>	Blue
<b>03</b>	Red	<b>08</b>	Brown
<b>04</b>	Orange	<b>10</b>	Gray
<b>05</b>	Yellow	<b>19</b>	Violet

Striped combinations available upon request; consult Customer Service.

# UL 1015, CSA TEW



CATALOG NUMBER	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOMINAL O.D.	
			INCHES	mm	INCHES	mm

### SOLID CONDUCTORS

<b>C2117A</b>	22	Solid	0.032	0.81	0.089	2.26
<b>C2118A</b>	20	Solid	0.032	0.81	0.096	2.44
<b>C2119A</b>	18	Solid	0.032	0.81	0.104	2.64

### STRANDED CONDUCTORS

<b>C2100A</b>	24	7/32	0.032	0.81	0.088	2.24
<b>C2101A</b>	22	7/30	0.032	0.81	0.094	2.39
<b>C2102A</b>	20	10/30	0.032	0.81	0.102	2.59
<b>C2103A</b>	18	16/30	0.032	0.81	0.112	2.84
<b>C2104A</b>	16	26/30	0.032	0.81	0.124	3.15
<b>C2105A</b>	14	41/30	0.032	0.81	0.141	3.58
<b>C2106A</b>	12	65/30	0.032	0.81	0.160	4.06
<b>C2107A</b>	10	105/30	0.033	0.84	0.184	4.67

### Product Construction:

#### Conductor:

- 24 thru 10 AWG
- Fully annealed tinned copper per ASTM B-33
- Solid or stranded

#### Insulation:

- Premium-grade, color-coded PVC
- Temperature Range: -20°C to +105°C
- Color Code: See chart below

### Applications:

- Internal wiring of electrical and electronic equipment
- Internal wiring of panels and meters
- Point-to-point wiring
- Suggested voltage rating: 600 volts

### Compliances:

- UL Style 1015 – 105°C, 600V
- CSA Type TEW
- RoHS Compliant Directive 2002/95/EC
- Designed to meet UL VW-1 Vertical Wire Flame Test

### Packaging:

- Please contact Customer Service for packaging and color options

### Color Code Chart

ORDERING SUFFIX	COLORS	ORDERING SUFFIX	COLORS
<b>01</b>	Black	<b>06</b>	Green
<b>02</b>	White	<b>07</b>	Blue
<b>03</b>	Red	<b>08</b>	Brown
<b>04</b>	Orange	<b>10</b>	Gray
<b>05</b>	Yellow	<b>19</b>	Violet

Striped combinations available upon request; consult Customer Service.

# MIL-W-76B

## Type MW

### Product Construction:

#### Conductor:

- 24 thru 12 AWG
- Fully annealed stranded tinned copper per ASTM B-33

#### Insulation:

- Premium-grade, color-coded PVC
- Type MW: Medium wall
- Temperature Range: -12°C to +90°C
- Color Code: See chart below

### Applications:

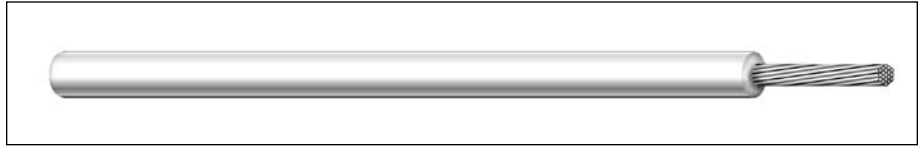
- Internal wiring of electrical and electronic equipment
- Internal wiring of panels and meters
- Point-to-point wiring
- Suggested voltage rating: 1000 volts (MIL-W-76B)
- Non QPL

### Compliances:

- RoHS Compliant Directive 2002/95/EC

### Packaging:

- Please contact Customer Service for packaging and color options



CATALOG NUMBER	TYPE DESIGNATION	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOMINAL O.D.	
				INCHES	mm	INCHES	mm
<b>MIL-W-76B TYPE MW (MEDIUM WALL)</b>							
<b>C7600A</b>	MW-C24(7)U	24	7/32	0.016	0.41	0.056	1.42
<b>C7602A</b>	MW-C22(7)U	22	7/30	0.016	0.41	0.062	1.57
<b>C7604A</b>	MW-C20(10)U	20	10/30	0.016	0.41	0.070	1.78
<b>C7606A</b>	MW-C18(16)U	18	16/30	0.016	0.41	0.080	2.03
<b>C7608A*</b>	MW-C16(26)U	16	26/30	0.016	0.41	0.092	2.34
<b>C7610A*</b>	MW-C14(41)U	14	41/30	0.016	0.41	0.109	2.77
<b>C7611A*</b>	MW-C12(65)U	12	65/30	0.016	0.41	0.128	3.25

\*-25°C to +105°C

### Color Code Chart

ORDERING SUFFIX	COLORS	ORDERING SUFFIX	COLORS
<b>01</b>	Black	<b>06</b>	Green
<b>02</b>	White	<b>07</b>	Blue
<b>03</b>	Red	<b>08</b>	Brown
<b>04</b>	Orange	<b>10</b>	Gray
<b>05</b>	Yellow	<b>19</b>	Violet

Striped combinations available upon request; consult Customer Service.

# UL Types MTW, TFF, AWM & CSA TEW

90°C 600 Volt MTW, TFF 105°C 600 Volt AWM/TEW



## UL TYPE MTW, AWM, TFF, CSA TYPE TEW-600 VOLT

CATALOG NUMBER	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOMINAL O.D.		STOCK COLORS	APPROX. NET WEIGHT LBS/M <sup>(6)</sup>
			INCHES	mm	INCHES	mm		
76502	18	16/30	0.032	0.81	0.110	2.79	1-12	10
76512	16	26/30	0.032	0.81	0.123	3.12	1-12	14
76812	14	19/.0159	0.032	0.81	0.136	3.40	1-12	20
76822	12	19/.0185	0.032	0.81	0.155	3.91	1-7	28
76832	10	19/.0234	0.032	0.81	0.179	4.55	1-5	42
76843	8	19/.0295	0.047	1.19	0.242	6.15	1-5	72

<sup>(6)</sup> Actual shipping weight may vary.

### Color Code Chart

ORDERING SUFFIX	COLORS	ORDERING SUFFIX	COLORS
01	Black	04	Orange
02	White	08	Brown
03	Red	19	Purple
07	Blue	10	Gray
06	Green	13	Pink

### Product Construction:

#### Conductor:

- 18 through 8 AWG fully annealed stranded bare copper per ASTM B-8

#### Insulation:

- Premium-grade, color-coded PVC
- Temperature Range:  
MTW: -40°C to +90°C  
TEW/AWM: -20°C to +105°C
- Color Code: See chart below

#### Jacket Marking:

- 18 and 16 AWG:  
CAROL (SIZE) 600V E# MTW (UL) OR TFF OR AWM VW-1 --- CSA TEW 105°C FT-1
- 14 through 8 AWG:  
CAROL (SIZE) 600V E# MTW (UL) OR AWM VW-1 --- CSA TEW 105°C FT-1

### Applications:

- Motor and transformer lead
- External wiring of machinery
- Internal wiring of electrical and electronic equipment
- Internal wiring of panels and meters
- Point-to-point wiring

### Features:

- Outstanding oil, flame and moisture resistance
- Extra flexible

### Compliances:

- UL and NMTBA Type MTW/AWM
- CSA TEW
- RoHS Compliant Directive 2002/95/EC
- Passes VW-1 Vertical Flame Test
- AWM Style 1015 – 18-8 AWG
- AWM Style 1335 – 18-10 AWG
- AWM Style 1336 – 8 AWG

### Packaging:

- Please contact Customer Service for packaging and color options



# Heavy Wall UL Types MTW, AWM & NEC Type THW

90°C 600 Volts

**Product Construction:**

**Conductor:**

- 6 and 4 AWG fully annealed stranded bare copper per ASTM B-8

**Insulation:**

- Premium-grade, color-coded PVC, Black
- Temperature Range: -40°C to +90°C

**Jacket Marking:**

- CAROL 6 AWG 600V E# MTW OR THW (UL) OR AWM

**Applications:**

- Motor and transformer lead
- External wiring of machinery

**Features:**

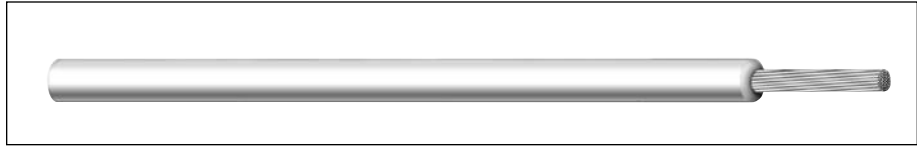
- Outstanding oil, flame and moisture resistance
- Extra flexible

**Compliances:**

- UL Type AWM
- UL and NMTBA Type MTW
- NEC Type THW
- RoHS Compliant Directive 2002/95/EC
- Passes UL VW-1 Vertical Flame Test

**Packaging:**

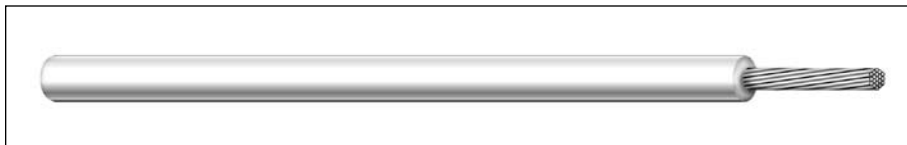
- Please contact Customer Service for packaging and color options



AWM, MTW, THW – 600 VOLT – UL							
CATALOG NUMBER	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOMINAL O.D.		APPROX. NET WEIGHT LBS/m <sup>(5)</sup>
			INCHES	mm	INCHES	mm	
76954	6	19/.0372	0.064	1.63	0.315	8.00	110
76994	4	19/.0469	0.065	1.65	0.365	9.27	150

<sup>(5)</sup>Actual shipping weight may vary.

# Rubber/PVC Test Lead



## Product Construction:

### Conductor:

- 20 and 18 AWG
- Fully annealed stranded tinned copper per ASTM B-33

### Insulation:

- Premium-grade, color-coded Rubber or PVC
- Temperature Range:
  - 20°C to +60°C Rubber
  - 25°C to +60°C PVC
- Color Code: See chart below

## Applications:

- Test equipment
- Oscillators

## Compliances:

- RoHS Compliant Directive 2002/95/EC

## Packaging:

- Please contact Customer Service for packaging and color options

CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		BREAKDOWN VOLTAGE (AC, rms)	WORKING VOLTAGE*	NOMINAL O.D.	
				INCHES	mm			INCHES	mm
<b>Rubber Test Lead</b>									
<b>C1326</b>	1	20	41/36	0.040	1.02	6,000V	1,500V	0.125	3.18
<b>C1319</b>	1	20	41/36	0.047	1.19	12,000V	3,000V	0.140	3.56
<b>C1321</b>	1	18	65/36	0.045	1.14	20,000V	5,000V	0.145	3.68
<b>C1318</b>	1	18	65/36	0.088	2.24	29,000V	10,000V	0.230	5.84

\*For intermittent duty only.

## Color Code Chart

ORDERING SUFFIX	COLORS
<b>01</b>	Black
<b>03</b>	Red

CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		BREAKDOWN VOLTAGE (AC, rms)	WORKING VOLTAGE*	NOMINAL O.D.	
				INCHES	mm			INCHES	mm
<b>PVC Test Lead</b>									
<b>C1320A</b>	1	18	65/36	0.047	1.19	20,000V	5,000V	0.140	3.56

\*For intermittent duty only.

## Color Code Chart

ORDERING SUFFIX	COLORS
<b>01</b>	Black
<b>03</b>	Red
<b>06</b>	Green