

# Thermostat Wire, Unjacketed

60°C Low Voltage and Intercom Cable

**Product Construction:**

**Conductors:**

- 20 AWG annealed solid bare copper per ASTM B-3

**Insulation:**

- Premium-grade, color-coded PVC
- Temperature range: -20°C to +60°C
- Color code: See chart below

**Jacket:**

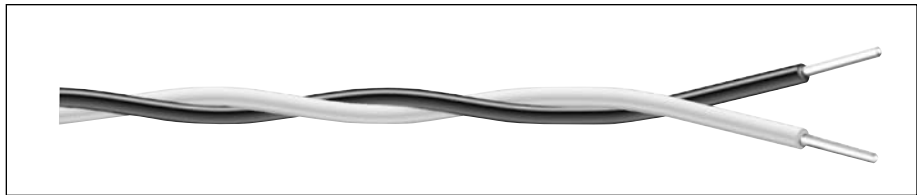
- This product is unjacketed

**Applications:**

- Thermostat control
- Heating and air conditioning installations
- Touch-plate systems
- Burglar alarms
- Intercom systems
- Door bells
- Annunciator and bell systems
- Remote control units
- Signal systems
- Other low-voltage installations

**Packaging:**

- Please contact Customer Service for packaging and color options



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOMINAL O.D.		APPROX. NET WEIGHT LBS/m <sup>(S)</sup>	STD. CTN.
				INCHES	mm	INCHES	mm		

**20 AWG – TWISTED CONDUCTORS – NO JACKET**

<b>05782</b>	2	20	Solid	0.008	0.203	0.098	2.49	7.5	4000'
<b>05783</b>	3	20	Solid	0.008	0.203	0.106	2.69	11.0	2000'
<b>05784*</b>	4	20	Solid	0.008	0.203	0.119	3.01	15.0	2000'
<b>05785*</b>	5	20	Solid	0.008	0.203	0.133	3.38	18.5	1000'
<b>05786*</b>	6	20	Solid	0.008	0.203	0.147	3.73	22.0	1000'
<b>05788*</b>	8	20	Solid	0.008	0.203	0.162	4.11	30.0	1000'

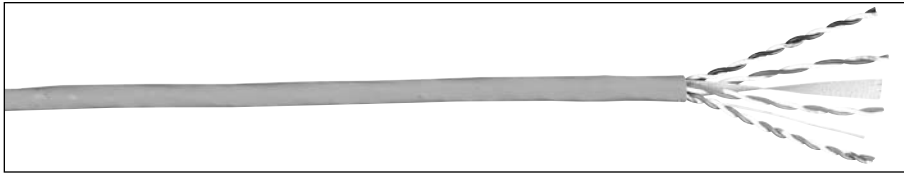
\*Non-stock item; minimum quantity purchase required.  
(S) Actual shipping weight may vary.

**Color Code Chart**

NO. OF CONDUCTORS	COLOR
<b>2</b>	White, Red
<b>3</b>	White, Red, Green
<b>4</b>	White, Red, Green, Blue
<b>5</b>	White, Red, Green, Blue, Yellow
<b>6</b>	White, Red, Green, Blue, Yellow, Brown
<b>8</b>	White, Red, Green, Blue, Yellow, Brown, Orange, Black

# Carol® Helix/Hi-Temp® Category 6 Cable

Standard-Compliant Solution



### PART NUMBERS

JACKET COLOR	PULL-PAC® II		SPOOL-PAC®	
	CMR (NON-PLENUM)	CMP (PLENUM)	CMR (NON-PLENUM)	CMP (PLENUM)
Blue	CR6.30.07	CP6.30.07	CR6.A3.07	CP6.A3.07
White	CR6.30.02	CP6.30.02	CR6.A3.02	CP6.A3.02
Gray	CR6.30.10	CP6.30.10	CR6.A3.10	CP6.A3.10
Green	CR6.30.06	CP6.30.06	CR6.A3.06	CP6.A3.06
Yellow	CR6.30.05	CP6.30.05	CR6.A3.05	CP6.A3.05
Red	CR6.30.03	CP6.30.03	CR6.A3.03	CP6.A3.03

### ELECTRICAL PERFORMANCE

FREQUENCY MHZ	PSACR (MIN)	ACR (MIN)	ATTENUATION (MAX)	PSNEXT (MIN)	NEXT (MIN)	PSELFEXT (MIN)	ELFEXT (MIN)	RETURN LOSS (MIN)	LCL (MIN)	ELTCTL (MIN)
1	70.3	72.3	2.0	72.3	74.3	64.8	67.8	20.0	40.0	35.0
4	59.3	61.5	3.8	63.3	65.3	52.8	55.7	23.0	40.0	23.0
10	51.3	53.3	6.0	57.3	59.3	44.8	47.8	25.0	40.0	15.0
16	46.7	48.7	7.6	54.2	56.2	40.7	43.7	25.0	38.0	10.9
20	44.3	46.3	8.5	52.8	54.8	38.8	41.7	25.0	37.0	9.0
31.25	39.2	41.2	10.7	49.9	51.9	34.9	37.9	23.6	35.1	5.1
62.5	29.9	32.0	15.4	45.4	47.4	28.9	31.8	21.5	32.0	5.0
100	22.5	24.5	19.8	42.3	44.3	24.8	27.8	20.1	30.0	5.0
150	14.9	16.9	24.7	39.7	41.7	21.3	24.3	18.9	28.2	5.0
200	8.8	10.8	29.0	37.8	39.8	18.8	21.8	18.0	27.0	5.0
250	3.5	5.5	32.8	36.3	38.3	16.8	19.8	17.3	26.0	5.0
350	—	—	39.8	34.1	36.1	13.9	16.9	16.3	—	—
400	—	—	43.0	33.3	35.3	12.8	15.8	15.9	—	—
500	—	—	48.9	31.8	33.8	10.8	13.8	15.2	—	—

Notes: Values are expressed in dB per 100m (328 ft.) length. Values above 250 MHz are for informational purposes only.

### PHYSICAL DATA

	CMR (NON-PLENUM)	CMP (PLENUM)
Nominal Cable Diameter (in)	0.205	0.200
Nominal Cable Weight (lbs/1000ft)	28	28
Minimum Bend Radius (in)	1.0	1.0
Maximum Pulling Force (lbs)	32	32
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +75

### ELECTRICAL CHARACTERISTICS

DC Resistance (max) Ohms/100m (328ft) @ 20°C	9.38
DC Resistance Unbalance (max) Individual Pair %	4.0
Delay Skew (max) ns/100m	45
Nom. Velocity of Propagation % Speed of Light	CMP: 70 CMR: 68
Characteristic Impedance	Ohms
Frequency (f):	1-250 MHz 100 ± 15
Input Impedance	Ohms
Frequency (f):	1-100 MHz 100 ± 15 100-250 MHz 100 ± 22

Data subject to change without notice.

### Product Construction:

#### Conductors:

- 23 AWG solid bare annealed copper

#### Separator

- Tape

#### Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer

#### Rip Cord

- Applied longitudinally under jacket

#### Jacket

- Non-Plenum: flame-retardant PVC
- Plenum: low-smoke, flame-retardant PVC
- TRU-Mark® print legend contains footage markings from 1000' to 0'

### Applications:

- IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T
- ANSI/TIA/EIA 854: 1000 BASE-TX
- 155 Mp/s, 1.2 Gb/s ATM
- ANSI X3.263: 100 Mb/s
- IEEE 802.3af DTE Power (PoE)
- Digital video

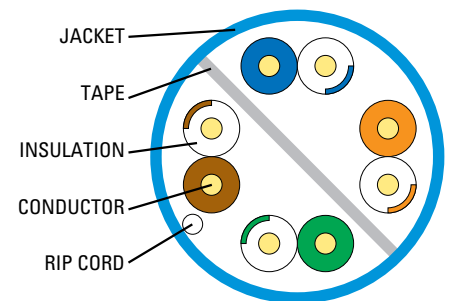
### Compliances:

- ANSI/TIA/EIA 568 B.2-1 (Category 6)
- ANSI/TIA/EIA 862 (Building Automation)
- ISO/IEC 11801 Ed. 2.0 (Class E)
- ICEA S-102-700 (Category 6)
- UL & c(UL) Type CMP (NFPA 262 and CSA FT-6 Steiner Tunnel Fire Tests for Plenum Applications)
- UL 444
- RoHS Compliant Directive 2002/95/EC
- Third-party verified for guaranteed performance

### Packaging:

- 1000' Pull-Pac® II
- 1000' Spool-Pac®

### CATEGORY 6 CROSS-SECTION



**CAROL BRAND**

**Helix/HiTemp®**



Designed to Meet  
NFPA 262 and CSA FT-6  
Steiner Tunnel Fire Tests  
for Plenum Applications  
Underwriters Laboratories Inc.



**General Cable**