



## Description:

22 AWG stranded (7x30) TC conductor, polypropylene insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall PVC jacket and 22 AWG stranded TC drain wire.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
37	22	7x30	TC - Tinned Copper	.030

### Insulation

#### Insulation Material:

Insulation Material	Dia. (in.)
PP - Polypropylene	.050

### Inner Shield

#### Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	Tape	Aluminum Foil-Polyester Tape	100

#### Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

### Outer Shield

#### Outer Shield Material:

Outer Shield Material
Unshielded

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cabling

Overall Nominal Diameter: 0.800 in.

### Pair

#### Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green

10	Red & Blue
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue
16	Green & Yellow
17	Green & Brown
18	Green & Orange
19	White & Blue
20	White & Yellow
21	White & Brown
22	White & Orange
23	Blue & Yellow
24	Blue & Brown
25	Blue & Orange
26	Brown & Yellow
27	Brown & Orange
28	Orange & Yellow
29	Purple & Orange
30	Purple & Red
31	Purple & White
32	Purple & Green
33	Purple & Blue
34	Purple & Yellow
35	Purple & Brown
36	Purple & Black
37	Gray & White

**Pair Lay Length & Direction:**

Lay Length (in.)	Twists/ft. (twist/ft)
1.750	6.850

### Mechanical Characteristics (Overall)

<b>Operating Temperature Range:</b>	-20°C To +80°C
<b>UL Temperature Rating:</b>	80°C (UL AWM Style 2919)
<b>Bulk Cable Weight:</b>	416.300 lbs/1000 ft.
<b>Max. Recommended Pulling Tension:</b>	368 lbs.
<b>Min. Bend Radius (Install)/Minor Axis:</b>	8.400 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

<b>NEC/(UL) Specification:</b>	CM
<b>CEC/C(UL) Specification:</b>	CM
<b>AWM Specification:</b>	UL Style 2919 (30 V 80°C)
<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	01/01/2004
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes

### Flame Test

UL Flame Test: UL1685 UL Loading

### Plenum/Non-Plenum

Plenum (Y/N): No

## Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

50

#### Nom. Inductance:

Inductance (µH/ft)

0.18

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

30

#### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

55

#### Nominal Velocity of Propagation:

VP (%)

66

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

15

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 10.600 Ohm/1000 ft

#### Max. Operating Voltage - UL:

Voltage

30 V RMS (UL AWM Style 2919)

300 V RMS (CM)

#### Max. Recommended Current:

Current

1 Amp per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9767 0601000	1,000 FT	458.000 LB	CHROME	C D	37 FS PR #22 HDPE PVC
9767 060500	500 FT	212.500 LB	CHROME	C D	37 FS PR #22 HDPE PVC

#### Notes:

C = CRATE REEL PUT-UP.

D = FINAL PUT-UP LENGTH MAY VARY -0% TO +20% FROM LENGTH SHOWN.

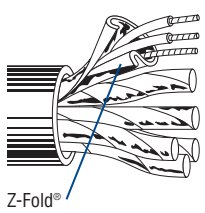
# Individually Shielded

## Audio, Control and Instrumentation Cables

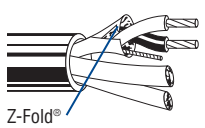
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

**22 AWG Stranded (7x30) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil® (100% Coverage) • 22 AWG Stranded TC Drain Wire**

**Polypropylene Insulation • Chrome PVC Jacket**

 <p>Z-Fold®</p>	<b>8777</b> UL AWM Style 2919 (30V 80°C)	NEC: 3 CM	See Chart 3 (Tech Info Section)	100 250 U-500 500 U-1000 1000 1640 3280 5000 10000††	30.5 76.2 U-152.4 152.4 U-304.8 304.8 499.9 999.7 1524.0 3048.0	4.7 10.0 21.0 20.0 41.0 44.0 70.5 141.0 215.0 460.0	2.1 4.5 9.5 9.1 18.6 20.0 32.0 64.0 97.6 208.8	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.273 6.93	50 127	66% 66%	30 98	55 180	180 180		
		CEC: CM		U-500 500 U-1000 1000	21.0 20.0 41.0 44.0	9.5 9.1 18.6 20.0	49.2Ω/km 34.8Ω/km	6.93 17.8	66% 66%	98 180	180 180						
		NEC: 6 CM CEC: CM		See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	8.4 19.0 43.0 83.0	3.8 8.6 19.5 37.7	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.362 9.19	50 127	66% 66%	30 98	55 180	180 180	For Plenum versions of 8777, see 88777, 87777 or 82777.
		CEC: CM			500 1000	152.4 304.8	43.0 83.0	19.5 37.7	49.2Ω/km 34.8Ω/km	9.19 23.8	66% 66%	98 180	180 180	For Plenum versions of 8778, see 88778, 87778 or 82778.			
		NEC: 9 CM CEC: CM			See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	11.5 29.5 57.5 113.0	5.2 13.4 26.1 51.3	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.417 10.59	50 127	66% 66%	30 98	55 180	180 180
		CEC: CM				500 1000	152.4 304.8	57.5 113.0	26.1 51.3	49.2Ω/km 34.8Ω/km	10.59 27.1	66% 66%	98 180	180 180			
		NEC: 11 CM CEC: CM		See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.1 65.5 130.0	5.5 29.7 59.0	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.464 11.79	50 127	66% 66%	30 98	55 180	180 180	
		CEC: CM			500 1000	152.4 304.8	65.5 130.0	29.7 59.0	49.2Ω/km 34.8Ω/km	11.79 30.1	66% 66%	98 180	180 180				
		NEC: 12 CM CEC: CM		See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	13.2 36.5 73.5 143.0	6.0 16.5 33.4 65.0	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.464 11.79	50 127	66% 66%	30 98	55 180	180 180	
		CEC: CM			500 1000	152.4 304.8	73.5 143.0	33.4 65.0	49.2Ω/km 34.8Ω/km	11.79 30.1	66% 66%	98 180	180 180				
NEC: 15 CM CEC: CM	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	17.8 49.5 98.0 197.0	8.1 22.5 44.5 89.5	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.548 13.92	50 127	66% 66%	30 98	55 180	180 180				
CEC: CM		500 1000	152.4 304.8	98.0 197.0	44.5 89.5	49.2Ω/km 34.8Ω/km	13.92 35.3	66% 66%	98 180	180 180							
NEC: 17 CM CEC: CM	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	20.0 109.0 215.0	9.1 49.5 97.7	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.577 14.66	50 127	66% 66%	30 98	55 180	180 180				
CEC: CM		500 1000	152.4 304.8	109.0 215.0	49.5 97.7	49.2Ω/km 34.8Ω/km	14.66 37.4	66% 66%	98 180	180 180							
NEC: 19 CM CEC: CM	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	22.9 123.0 244.0	10.4 55.8 110.8	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.603 15.32	50 127	66% 66%	30 98	55 180	180 180				
CEC: CM		500 1000	152.4 304.8	123.0 244.0	55.8 110.8	49.2Ω/km 34.8Ω/km	15.32 39.4	66% 66%	98 180	180 180							
NEC: 27 CM CEC: CM	See Chart 3 (Tech Info Section)	100 250† 500 1000	30.5 76.2 152.4 304.8	33.9 83.8 163.0 341.0	15.4 38.0 74.0 154.8	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.709 18.00	50 127	66% 66%	30 98	55 180	180 180				
CEC: CM		500 1000	152.4 304.8	163.0 341.0	74.0 154.8	49.2Ω/km 34.8Ω/km	18.00 45.7	66% 66%	98 180	180 180							
NEC: 37 CM CEC: CM	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	224.0 481.0	101.8 218.6	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.800 20.32	50 127	66% 66%	30 98	55 180	180 180				
CEC: CM		1000†	304.8	481.0	218.6	49.2Ω/km 34.8Ω/km	20.32 51.8	66% 66%	98 180	180 180							

**Polypropylene Insulation • Black Low-Smoke, Zero-Halogen Jacket**

 <p>Z-Fold®</p>	<b>8777SB</b> U300V RMS, Non-conduit	NEC: 3 CMG-LS CEC: CMG-LS FT4 Limited Smoke	See Chart 3 (Tech Info Section)	U-500† U-1000 1000†	U-152.4 U-304.8 304.8	19.5 38.0 39.0	8.9 17.3 17.7	15.0Ω/M' 49.2Ω/km	10.6Ω/M' 34.8Ω/km	.273 6.93	50 127	66% 66%	30 98	55 180	180 180
		CEC: CM		U-1000†	304.8	39.0	17.7	49.2Ω/km 34.8Ω/km	6.93 17.8	66% 66%	98 180	180 180			
		CEC: CM		1000†	304.8	39.0	17.7	49.2Ω/km 34.8Ω/km	6.93 17.8	66% 66%	98 180	180 180			

DCR = DC Resistance • TC = Tinned Copper

See Attenuation, Rise Time and Bit Rate Data for this series on page 5.39.

\*Capacitance between conductors.

\*\*Capacitance between one conductor and other conductors connected to shield.

† Spools are one piece, but length may vary -0 to +20% from length shown.

†† Final put-up length may vary -10% to +20% from length shown. May contain 2 pieces. Minimum length of any one piece is 1500 ft.