



## 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.)
27	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: 0.709 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

**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>	309.500 lbs/1000 ft.
<b>Max. Recommended Pulling Tension:</b>	629 lbs.
<b>Min. Bend Radius (Install)/Minor Axis:</b>	7 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**

<b>UL Flame Test:</b>	UL1685 UL Loading
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**Plenum/Non-Plenum**

<b>Plenum (Y/N):</b>	No
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### Electrical Characteristics (Overall)

**Nom. Characteristic Impedance:**

Impedance (Ohm)
50

**Nom. Inductance:**

<b>Inductance (μH/ft)</b>
0.18

**Nom. Capacitance Conductor to Conductor:**

<b>Capacitance (pF/ft)</b>
30

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

<b>Capacitance (pF/ft)</b>
55

**Nominal Velocity of Propagation:**

<b>VP (%)</b>
66

**Nom. Conductor DC Resistance:**

<b>DCR @ 20°C (Ohm/1000 ft)</b>
15

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

**Max. Operating Voltage - UL:**

<b>Voltage</b>
30 V RMS (UL AWM Style 2919)
300 V RMS (CM)

**Max. Recommended Current:**

<b>Current</b>
1 Amp per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8773 060100	100 FT	32.600 LB	CHROME	C	27 FS PR #22 HDPE PVC
8773 0601000	1,000 FT	329.000 LB	CHROME	C	27 FS PR #22 HDPE PVC
8773 060500	500 FT	157.000 LB	CHROME	C	27 FS PR #22 HDPE PVC

**Notes:**

C = CRATE REEL PUT-UP.

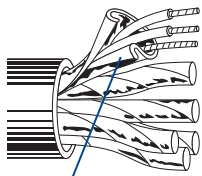
# Individually Shielded

## 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	See	100	30.5	4.7	2.1	15.0Ω/M'	10.6Ω/M'	.273	6.93	50	66%	30	98	55	180		
		CM		Chart 3	250	76.2	10.0	4.5	49.2Ω/km	34.8Ω/km										
		CEC:		(Tech Info	U-500	U-152.4	21.0	9.5												
		CM		Section)	500	152.4	20.0	9.1												
						U-1000	U-304.8	41.0	18.6											
						1000	304.8	44.0	20.0											
						1640	499.9	70.5	32.0											
						3280	999.7	141.0	64.0											
						5000	1524.0	215.0	97.6											
						10000††	3048.0	460.0	208.8											

For Plenum versions of 8777, see 88777, 87777 or 82777.

<b>8778</b>	NEC:	6	See	100	30.5	8.4	3.8	15.0Ω/M'	10.6Ω/M'	.362	9.19	50	66%	30	98	55	180
	CM		Chart 3	250	76.2	19.0	8.6	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	500	152.4	43.0	19.5										
	CM		Section)	1000	304.8	83.0	37.7										

For Plenum versions of 8778, see 88778, 87778 or 82778.

<b>8774</b>	NEC:	9	See	100	30.5	11.5	5.2	15.0Ω/M'	10.6Ω/M'	.417	10.59	50	66%	30	98	55	180
	CM		Chart 3	250	76.2	29.5	13.4	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	500	152.4	57.5	26.1										
	CM		Section)	1000	304.8	113.0	51.3										

<b>8775</b>	NEC:	11	See	100	30.5	12.1	5.5	15.0Ω/M'	10.6Ω/M'	.464	11.79	50	66%	30	98	55	180
	CM		Chart 3	500	152.4	65.5	29.7	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	1000	304.8	130.0	59.0										
	CM		Section)														

<b>9768</b>	NEC:	12	See	100	30.5	13.2	6.0	15.0Ω/M'	10.6Ω/M'	.464	11.79	50	66%	30	98	55	180
	CM		Chart 3	250	76.2	36.5	16.5	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	500	152.4	73.5	33.4										
	CM		Section)	1000	304.8	143.0	65.0										

<b>8776</b>	NEC:	15	See	100	30.5	17.8	8.1	15.0Ω/M'	10.6Ω/M'	.548	13.92	50	66%	30	98	55	180
	CM		Chart 3	250	76.2	49.5	22.5	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	500	152.4	98.0	44.5										
	CM		Section)	1000	304.8	197.0	89.5										

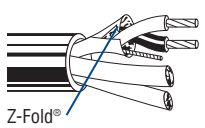
<b>9769</b>	NEC:	17	See	100	30.5	20.0	9.1	15.0Ω/M'	10.6Ω/M'	.577	14.66	50	66%	30	98	55	180
	CM		Chart 3	500	152.4	109.0	49.5	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	1000	304.8	215.0	97.7										
	CM		Section)														

<b>8769</b>	NEC:	19	See	100	30.5	22.9	10.4	15.0Ω/M'	10.6Ω/M'	.603	15.32	50	66%	30	98	55	180
	CM		Chart 3	500	152.4	123.0	55.8	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	1000	304.8	244.0	110.8										
	CM		Section)														

<b>8773</b>	NEC:	27	See	100	30.5	33.9	15.4	15.0Ω/M'	10.6Ω/M'	.709	18.00	50	66%	30	98	55	180
	CM		Chart 3	250†	76.2	83.8	38.0	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info	500	152.4	163.0	74.0										
	CM		Section)	1000	304.8	341.0	154.8										

<b>9767</b>	NEC:	37	See	500†	152.4	224.0	101.8	15.0Ω/M'	10.6Ω/M'	.800	20.32	50	66%	30	98	55	180
	CM		Chart 3	1000†	304.8	481.0	218.6	49.2Ω/km	34.8Ω/km								
	CEC:		(Tech Info														
	CM		Section)														

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

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

DCR = DC Resistance • TC = Tinned Copper

\*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.