

**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.)
17	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: 0.577 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

Pair Lay Length & Direction:

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

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	199.900 lbs/1000 ft.
Max. Recommended Pulling Tension:	520 lbs.
Min. Bend Radius (Install)/Minor Axis:	5.900 in.

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

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

Flame Test

UL Flame Test:	UL1685 UL Loading
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Plenum/Non-Plenum

Plenum (Y/N):	No
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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

9769 Multi-Conductor - CM Rated Cable

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 1354)
300 V RMS (CM)

Max. Recommended Current:

Current
1.4 Amps per conductor @ 25°C

Put Ups and Colors:

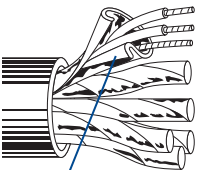
Item #	Putup	Ship Weight	Color	Notes	Item Desc
9769 060100	100 FT	20.800 LB	CHROME	C	17 FS PR #22 HDPE PVC
9769 0601000	1,000 FT	203.000 LB	CHROME	C	17 FS PR #22 HDPE PVC
9769 060500	500 FT	103.000 LB	CHROME	C	17 FS PR #22 HDPE PVC

Notes:

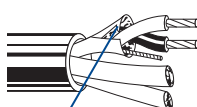
C = CRATE REEL PUT-UP.

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																		
 Z-Fold®	8777	NEC:	3	See Chart 3 (Tech Info Section)	100	30.5	4.7	2.1	15.0Ω/M'	10.6Ω/M'	.273	6.93	50	66%	30	98	55	180
		CM			250	76.2	10.0	4.5	49.2Ω/km	34.8Ω/km								
		CEC:			U-500	U-152.4	21.0	9.5										
		CM			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.																		
	8778	NEC:	6	See Chart 3 (Tech Info Section)	100	30.5	8.4	3.8	15.0Ω/M'	10.6Ω/M'	.362	9.19	50	66%	30	98	55	180
		CM			250	76.2	19.0	8.6	49.2Ω/km	34.8Ω/km								
		CEC:			500	152.4	43.0	19.5										
		CM			1000	304.8	83.0	37.7										
For Plenum versions of 8778, see 88778, 87778 or 82778.																		
	8774	NEC:	9	See Chart 3 (Tech Info Section)	100	30.5	11.5	5.2	15.0Ω/M'	10.6Ω/M'	.417	10.59	50	66%	30	98	55	180
		CM			250	76.2	29.5	13.4	49.2Ω/km	34.8Ω/km								
		CEC:			500	152.4	57.5	26.1										
		CM			1000	304.8	113.0	51.3										
	8775	NEC:	11	See Chart 3 (Tech Info Section)	100	30.5	12.1	5.5	15.0Ω/M'	10.6Ω/M'	.464	11.79	50	66%	30	98	55	180
		CM			500	152.4	65.5	29.7	49.2Ω/km	34.8Ω/km								
		CEC:			1000	304.8	130.0	59.0										
		CM																
	9768	NEC:	12	See Chart 3 (Tech Info Section)	100	30.5	13.2	6.0	15.0Ω/M'	10.6Ω/M'	.464	11.79	50	66%	30	98	55	180
		CM			250	76.2	36.5	16.5	49.2Ω/km	34.8Ω/km								
		CEC:			500	152.4	73.5	33.4										
		CM			1000	304.8	143.0	65.0										
	8776	NEC:	15	See Chart 3 (Tech Info Section)	100	30.5	17.8	8.1	15.0Ω/M'	10.6Ω/M'	.548	13.92	50	66%	30	98	55	180
		CM			250	76.2	49.5	22.5	49.2Ω/km	34.8Ω/km								
		CEC:			500	152.4	98.0	44.5										
		CM			1000	304.8	197.0	89.5										
	9769	NEC:	17	See Chart 3 (Tech Info Section)	100	30.5	20.0	9.1	15.0Ω/M'	10.6Ω/M'	.577	14.66	50	66%	30	98	55	180
		CM			500	152.4	109.0	49.5	49.2Ω/km	34.8Ω/km								
		CEC:			1000	304.8	215.0	97.7										
		CM																
	8769	NEC:	19	See Chart 3 (Tech Info Section)	100	30.5	22.9	10.4	15.0Ω/M'	10.6Ω/M'	.603	15.32	50	66%	30	98	55	180
		CM			500	152.4	123.0	55.8	49.2Ω/km	34.8Ω/km								
		CEC:			1000	304.8	244.0	110.8										
		CM																
	8773	NEC:	27	See Chart 3 (Tech Info Section)	100	30.5	33.9	15.4	15.0Ω/M'	10.6Ω/M'	.709	18.00	50	66%	30	98	55	180
		CM			250†	76.2	83.8	38.0	49.2Ω/km	34.8Ω/km								
		CEC:			500	152.4	163.0	74.0										
		CM			1000	304.8	341.0	154.8										
	9767	NEC:	37	See Chart 3 (Tech Info Section)	500†	152.4	224.0	101.8	15.0Ω/M'	10.6Ω/M'	.800	20.32	50	66%	30	98	55	180
		CM			1000†	304.8	481.0	218.6	49.2Ω/km	34.8Ω/km								
		CEC:																
		CM																

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

U300V RMS, Non-conduit  Z-Fold®	8777SB new	NEC:	3	See Chart 3 (Tech Info Section)	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			U-1000	U-304.8	38.0	17.3	49.2Ω/km	34.8Ω/km								
		CEC:			1000†	304.8	39.0	17.7										
		CMG-LS FT4 Limited Smoke																

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.