



Description:

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

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
12	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: 0.464 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

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:	136.200 lbs/1000 ft.
Max. Recommended Pulling Tension:	320 lbs.
Min. Bend Radius (Install)/Minor Axis:	4.600 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. 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

9768 Multi-Conductor - CM Rated Cable

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
1.4 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9768 060100	100 FT	13.900 LB	CHROME	C	12 FS PR #22 HDPE PVC
9768 0601000	1,000 FT	135.000 LB	CHROME	C	12 FS PR #22 HDPE PVC
9768 060250	250 FT	34.500 LB	CHROME		12 FS PR #22 HDPE PVC
9768 060500	500 FT	69.500 LB	CHROME	C	12 FS PR #22 HDPE PVC

Notes:

C = CRATE REEL PUT-UP.

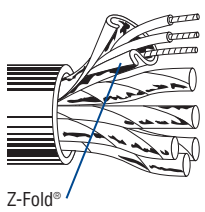
Individually Shielded

Audio, Control and Instrumentation Cables

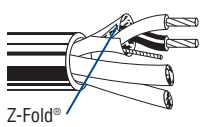
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

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>	UL AWM Style 2919 (30V 80°C)	8777	NEC: 3 CM CEC: 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	66%	30	98	55	180	
	For Plenum versions of 8777, see 88777, 87777 or 82777.																	
	8778	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	66%	30	98	55	180	For Plenum versions of 8778, see 88778, 87778 or 82778.	
	8774	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	66%	30	98	55	180		
	8775	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	66%	30	98	55	180		
	9768	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	66%	30	98	55	180		
	8776	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	66%	30	98	55	180		
	9769	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	66%	30	98	55	180		
	8769	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	66%	30	98	55	180		
	8773	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	66%	30	98	55	180		
9767	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	66%	30	98	55	180			

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

 <p>Z-Fold®</p>	U300V RMS, Non-conduit	8777SB	NEC: 3 CMG-LS CEC: CMG-LS FT4 Limited Smoke	See Chart 3 (Tech Info Section)	U-500† U-152.4 U-1000 U-304.8 1000† 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	66%	30	98	55	180		
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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.

