

Individually Shielded

Audio, Control and Instrumentation Cables

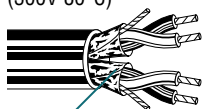
Plenum-Rated and Non-Plenum

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) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire

Semi-rigid PVC Insulation • Pale Fawn Beige PVC Jacket (Shielded Pairs Parallel under Jacket)

UL AWM Style 2464 (300V 80°C)	9406	NEC:	2	Black &	100	30.5	4.2	1.9	15.0Ω/M'	13.0Ω/M'	.173	4.39	50	60%	50	164	95	312
		CMG		White,	U-500	U-152.4	16.5	7.5	49.2Ω/km	42.7Ω/km	x	x						
		CEC:		Black &	500	152.4	17.0	7.7			.280	7.11						
		CMG FT4		Yellow	U-1000	U-304.8	33.0	15.0										
					1000	304.8	33.0	15.0										

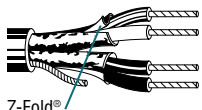


Z-Fold®

22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire

Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

300V RMS 60°C	8723	NEC:	2	Red &	100	30.5	2.3	1.0	15.0Ω/M'	16.6Ω/M'	.168	4.27	45	66%	35	115	62	203	
		CM		Black,	U-500	U-152.4	10.5	4.8	49.2Ω/km	54.5Ω/km									
		CEC:		Green &	500	152.4	10.0	4.5											
		CM		White	U-1000	U-304.8	20.0	9.1											
						1000	304.8	20.0	9.1										
						1640	499.9	32.8	14.9										
						U-2000	U-609.6	40.0	18.2										
						2000	609.6	40.0	18.2										
						3280	999.7	65.6	29.8										
						5000	1524.0	95.0	43.2										
				10000	3048.0	200.0	90.9												

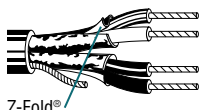


Z-Fold®

For Plenum versions of 8723, see 88723, 87723 or 82723.

Plenum • Halar® Insulation • Natural Flammarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

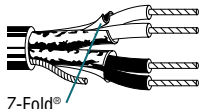
300V RMS, Non-conduit	82723	NEC:	2	Red &	U-500†	U-152.4	10.0	4.5	14.7Ω/M'	16.6Ω/M'	.148	3.76	36	62%	43	141	75	246
		CMP		Black,	U-1000	U-304.8	19.0	8.6	48.2Ω/km	54.5Ω/km								
		CEC:		Green &	1000†	304.8	20.0	9.1										
		CMP FT6		White	U-2000†	U-609.6	38.0	17.3										



Z-Fold®

Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

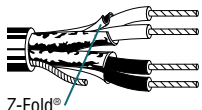
300V RMS, Non-conduit	88723	NEC:	2	Red &	100	30.5	3.4	1.5	16.0Ω/M'	14.7Ω/M'	.148	3.76	40	69%	35	115	67	220
		CMP		Black,	500	152.4	11.0	5.0	52.5Ω/km	48.2Ω/km								
		CEC:		Green &	1000	304.8	21.0	9.5										
		CMP FT6		White														



Z-Fold®

Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

300V RMS, Non-conduit	87723	NEC:	2	Red &	500†	152.4	11.0	5.0	16.0Ω/M'	14.7Ω/M'	.148	3.76	40	69%	35	115	67	220
		CMP		Black,	1000†	304.8	20.0	9.1	52.5Ω/km	48.2Ω/km								
		CEC:		Green &														
		CMP FT6		White														



Z-Fold®

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.

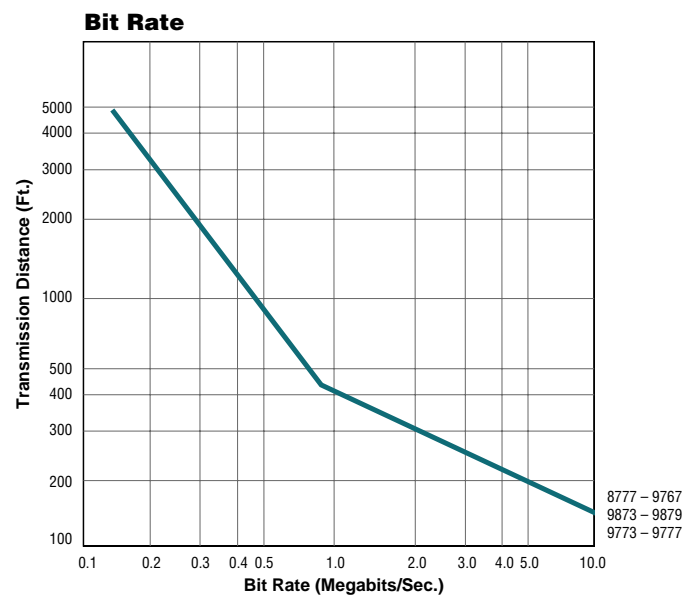
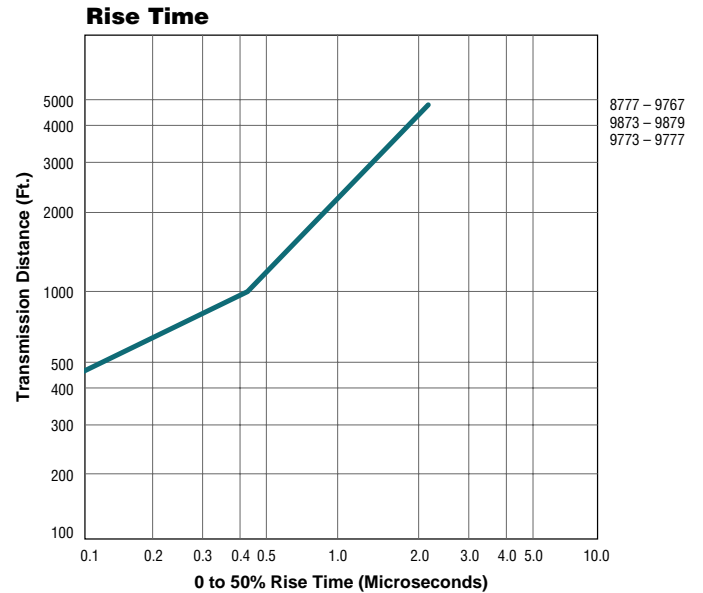
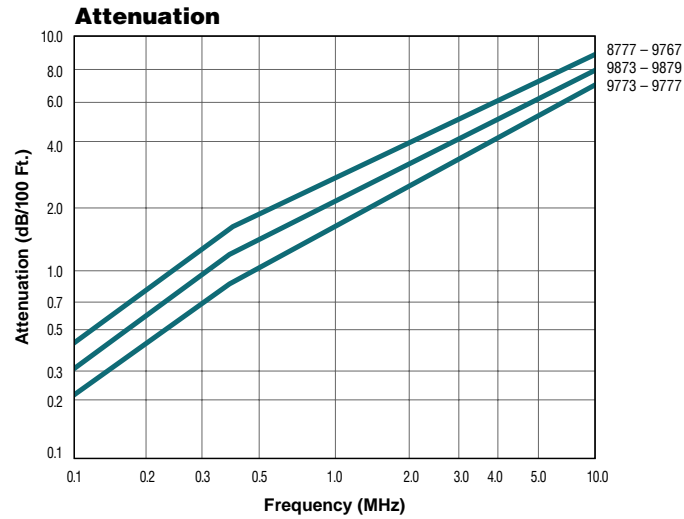
**Capacitance between one conductor and other conductors connected to shield.

† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length show.

Halar is an Ausimont Corporation trademark.



Individually Shielded Cable Characteristics



Recommended for audio, pulse, and radio frequency applications requiring superior circuit isolation.

Insulation resistance between shields:
100 megohms/M' nom.

Capacitance between adjacent shields:
115 pF/ft. nom.

Working voltage between adjacent shields:
50 volts max.



Analog Multi-Pair Snake Cable

CM Rated Cables

Individually Shielded Twisted Pairs



Individually Shielded and Jacketed Pairs

NEC: CM (CEC: CM)

Product Description

22 AWG stranded (7x30) tinned copper conductor. Polypropylene insulation. Twisted pairs individually shielded with 100% Beldfoil®. Overall Chrome PVC jacket and 22 AWG stranded tinned copper drain wire.

Color Code: See Chart 3 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.030" (.76mm)
Nominal OD — Insulation	.050" (1.27mm)

Approvals

NEC	CM
CEC	CM

UL Ratings UL AWM Style 2919

Voltage Rating 30V

Temperature Rating 80°C

Nominal DCR

Conductor	16.0Ω/M' (52.5Ω/km)
Shield	10.6Ω/M' (34.8Ω/km)

Nominal Impedance 50Ω

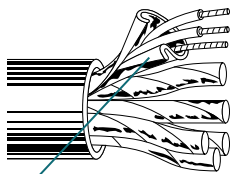
Nominal Velocity of Propagation 66%

Nominal Capacitance

Between Conductors	30 pF/Ft. (98 pF/m)
Between Conductor/Shield*	55 pF/Ft. (180 pF/m)

DCR = DC Resistance

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



Z-Fold®

Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm

CM Rated Twisted Pairs NEC: CM (CEC: CM)

22 AWG							
8777	3	100	30.5	5.3	2.4	.273	6.93
		250	76.2	11.3	5.1		
	U-500	U-152.4	21.0	9.5			
		500	152.4	21.0	9.5		
	U-1000	U-304.8	41.0	18.6			
		1000	304.8	42.0	19.1		
		1640	499.9	67.2	30.6		
		3280	999.7	137.8	62.6		
		5000	1524.0	210.0	95.5		
		10000	3048.0	450.0	204.5		

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

8778	6	100	30.5	8.4	3.8	.362	9.19
		250	76.2	20.8	9.4		
		500	152.4	43.0	19.5		
		1000	304.8	83.0	37.7		

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

8774	9	100	30.5	11.6	5.3	.417	10.59
		250	76.2	28.8	13.1		
		500	152.4	58.0	26.4		
		1000	304.8	115.0	52.3		

8775	11	100	30.5	14.1	6.4	.464	11.79
		500	152.4	67.0	30.5		
		1000	304.8	133.0	60.5		

9768	12	100	30.5	14.9	6.8	.464	11.79
		250	76.2	35.5	16.1		
		500	152.4	73.5	33.4		
		1000	304.8	143.0	65.0		

8776	15	100	30.5	19.7	9.0	.548	13.92
		250	76.2	49.5	22.5		
		500	152.4	98.0	44.5		
		1000	304.8	197.0	89.5		

9769	17	100	30.5	22.0	10.0	.577	14.66
		500	152.4	109.0	49.5		
		1000	304.8	215.0	97.7		

8769	19	100	30.5	25.0	11.4	.603	15.32
		500	152.4	123.5	56.1		
		1000	304.8	245.0	111.4		

8773	27	100	30.5	33.8	15.4	.709	18.00
		250†	76.2	85.0	38.6		
		500†	152.4	166.0	75.5		
		1000†	304.8	346.0	157.3		

9767	37	500†	152.4	224.0	101.8	.800	20.32
		1000†	304.8	481.0	218.6		

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



Belden® Color Code Charts

Color Code Chart No. 1

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

18 Gage conductors in cables 8446 through 8449 are Black and White.

Color Code Chart Nos. 2 and 2R — ICEA (Insulated Cable Engineers Association) Standard*

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/Black Stripe
8	Red/Black Stripe
9	Green/Black Stripe
10	Orange/Black Stripe
11	Blue/Black Stripe
12	Black/White Stripe
13	Red/White Stripe

Cond. No.	Color
14	Green/White Stripe
15	Blue/White Stripe
16	Black/Red Stripe
17	White/Red Stripe
18	Orange/Red Stripe
19	Blue/Red Stripe
20	Red/Green Stripe
21	Orange/Green Stripe
22	Black/White/Red
23	White/Black/Red
24	Red/Black/White
25	Green/Black/White
26	Orange/Black/White

Cond. No.	Color
27	Blue/Black/White
28	Black/Red/Green
29	White/Red/Green
30	Red/Black/Green
31	Green/Black/Orange
32	Orange/Black/Green
33	Blue/White/Orange
34	Black/White/Orange
35	White/Red/Orange
36	Orange/White/Blue
37	White/Red/Blue
38	Black/White/Green
39	White/Black/Green

Cond. No.	Color
40	Red/White/Green
41	Green/White/Blue
42	Orange/Red/Green
43	Blue/Red/Green
44	Black/White/Blue
45	White/Black/Blue
46	Red/White/Blue
47	Green/Orange/Red
48	Orange/Red/Blue
49	Blue/Orange/Red
50	Black/Orange/Red

* 2 = Spiral Stripe
2R = Ring Band Striping

Color Code Chart No. 3 for Paired Cables (Belden Standard)

Pair No.	Color Combination
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

Pair No.	Color Combination
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

Pair No.	Color Combination
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

Pair No.	Color Combination
31	Purple & White
32	Purple & Dark Green
33	Purple & Light Blue
34	Purple & Yellow
35	Purple & Brown
36	Purple & Black
37	Gray & White

Color Code Chart No. 4 for Paired Cables

Pair No.	Color Combination
1	White & Blue
2	White & Orange
3	White & Green
4	White & Brown
5	White & Gray

Pair No.	Color Combination
6	Red & Blue
7	Red & Orange
8	Red & Green
9	Red & Brown
10	Red & Gray

Pair No.	Color Combination
11	Black & Blue
12	Black & Orange
13	Black & Green
14	Black & Brown
15	Black & Gray

Pair No.	Color Combination
16	Yellow & Blue
17	Yellow & Orange
18	Yellow & Green
19	Yellow & Brown
20	Yellow & Gray

Pair No.	Color Combination
21	Violet & Blue
22	Violet & Orange
23	Violet & Green
24	Violet & Brown
25	Violet & Gray

Color Code Chart No. 5 for Paired Cables (Western Electric Standard)

Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe

Pair No.	Color Combination
6	Red/Blue Stripe & Blue/Red Stripe
7	Red/Orange Stripe & Orange/Red Stripe
8	Red/Green Stripe & Green/Red Stripe
9	Red/Brown Stripe & Brown/Red Stripe
10	Red/Gray Stripe & Gray/Red Stripe

Pair No.	Color Combination
11	Black/Blue Stripe & Blue/Black Stripe
12	Black/Orange Stripe & Orange/Black Stripe
13	Black/Green Stripe & Green/Black Stripe
14	Black/Brown Stripe & Brown/Black Stripe
15	Black/Gray Stripe & Gray/Black Stripe

Pair No.	Color Combination
16	Yellow/Blue Stripe & Blue/Yellow Stripe
17	Yellow/Orange Stripe & Orange/Yellow Stripe
18	Yellow/Green Stripe & Green/Yellow Stripe
19	Yellow/Brown Stripe & Brown/Yellow Stripe
20	Yellow/Gray Stripe & Gray/Yellow Stripe

Pair No.	Color Combination
21	Purple/Blue Stripe & Blue/Purple Stripe
22	Purple/Orange Stripe & Orange/Purple Stripe
23	Purple/Green Stripe & Green/Purple Stripe
24	Purple/Brown Stripe & Brown/Purple Stripe
25	Purple/Gray Stripe & Gray/Purple Stripe

