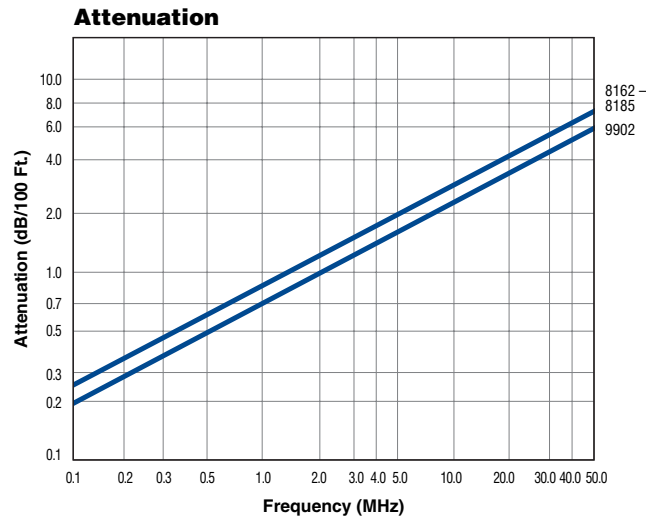
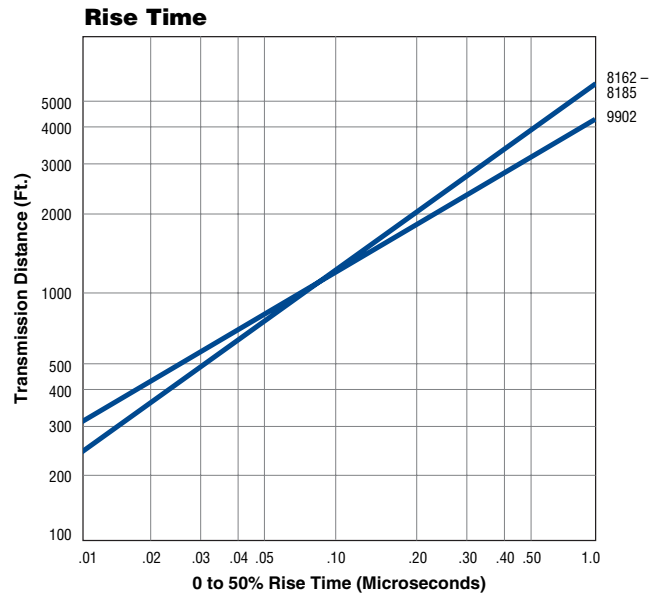


# Individually Shielded Pairs with Overall Foil/Braid Shield

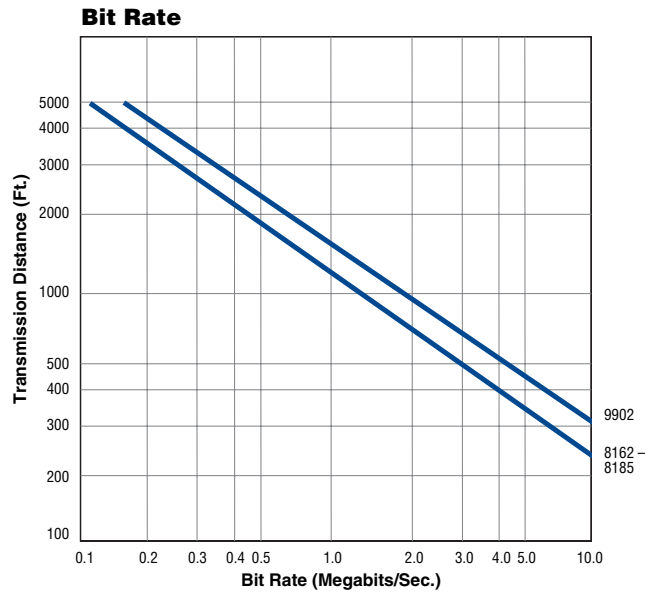
## Cable Characteristics



Note: see index for 9902 page number.



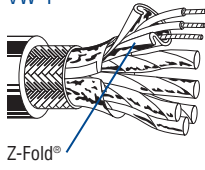
Cables are terminated in their characteristic impedance. Signal source electrical characteristics: 50 ohms and 10% to 90% rise time less than 5 nanoseconds.



Charts assume 5% peak-to-peak time jitter as determined by eye pattern measurements of pseudorandom NRZ code.

# Individually Shielded Pairs with Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications

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
<b>24 AWG Stranded (7x32) TC Conductors • Twisted Pairs Individually Beldfoil® Shielded + Overall Beldfoil (100% Coverage) + TC Braid Shield (65%) • Drain Wire<sup>▲</sup></b>																		
<b>Datalene® Insulation • Chrome PVC Jacket</b>																		
UL AWM Style 2493 (60°C) VW-1  	<b>8162</b>	NEC:	2	See Chart 3	100	30.5	6.2	2.8	24.0Ω/M'	Individual:	.343	8.71	100	78%	12.5	41	22	72.2
		CM			500	152.4	30.0	13.6	78.7Ω/km	18.0Ω/M'								
	CEC:	(Tech Info Section)	1000	304.8	57.0	25.9	59.1Ω/km	Overall:	4.3Ω/M'									
	CM		14.1Ω/km															
	<b>8163</b>	NEC:	3	See Chart 3	100	30.5	7.0	3.2	24.0Ω/M'	Individual:	.359	9.12	100	78%	12.5	41	22	72.2
		CM			500	152.4	34.0	15.5	78.7Ω/km	18.0Ω/M'								
	CEC:	(Tech Info Section)	1000	304.8	66.0	30.0	59.1Ω/km	Overall:	4.4Ω/M'									
CM	14.4Ω/km																	
<b>8164</b>	NEC:	4	See Chart 3	100	30.5	8.2	3.7	24.0Ω/M'	Individual:	.388	9.86	100	78%	12.5	41	22	72.2	
	CM			500	152.4	39.5	18.0	78.7Ω/km	18.0Ω/M'									
CEC:	(Tech Info Section)	1000	304.8	79.0	35.9	59.1Ω/km	Overall:	3.2Ω/M'										
CM		10.5Ω/km																
<b>8165</b>	NEC:	5	See Chart 3	100	30.5	9.0	4.1	24.0Ω/M'	Individual:	.413	10.49	100	78%	12.5	41	22	72.2	
	CM			500	152.4	45.0	20.5	78.7Ω/km	18.0Ω/M'									
CEC:	(Tech Info Section)	1000	304.8	89.0	40.5	59.1Ω/km	Overall:	3.4Ω/M'										
CM		11.2Ω/km																
<b>8166</b>	NEC:	6	See Chart 3	100	30.5	9.0	4.1	24.0Ω/M'	Individual:	.446	11.33	100	78%	12.5	41	22	72.2	
	CM			500	152.4	50.0	22.7	78.7Ω/km	18.0Ω/M'									
CEC:	(Tech Info Section)	1000	304.8	99.0	45.0	59.1Ω/km	Overall:	2.8Ω/M'										
CM		9.2Ω/km																
<b>8167</b>	NEC:	7	See Chart 3	500	152.4	52.5	23.9	24.0Ω/M'	Individual:	.446	11.33	100	78%	12.5	41	22	72.2	
	CM			1000	304.8	103.0	46.7	78.7Ω/km	18.0Ω/M'									
CEC:	(Tech Info Section)	59.1Ω/km	Overall:	2.8Ω/M'														
CM		9.2Ω/km																

<sup>▲</sup>24 AWG stranded TC drain wire

DCR = DC Resistance • TC = Tinned Copper

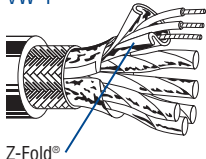
\*Capacitance between conductors.

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

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

## Individually Shielded Pairs with Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications

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
<b>24 AWG</b> Stranded (7x32) TC Conductors • Twisted Pairs Individually Beldfoil® Shielded + Overall Beldfoil (100% Coverage) + TC Braid Shield (65%) • Drain Wire <sup>▲</sup>																		
<b>Datalene® Insulation • Chrome PVC Jacket</b>																		
UL AWM Style 2493 (60°C) VW-1   Z-Fold®	<b>8168</b>	NEC: CM CEC: CM	8	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	10.8 61.5 115.0	4.9 28.0 52.3	24.0Ω/M' 78.7Ω/km	Individual: 18.0Ω/M' 59.1Ω/km Overall: 3.0Ω/M' 9.8Ω/km	.479 12.17	100	78%	12.5	41	22	72.2	
	<b>8170</b>	NEC: CM CEC: CM	10	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	18.0 83.0 164.0	8.2 37.7 74.5	24.0Ω/M' 78.7Ω/km	Individual: 18.0Ω/M' 59.1Ω/km Overall: 2.7Ω/M' 8.9Ω/km	.584 14.83	100	78%	12.5	41	22	72.2	
	<b>8175</b>	NEC: CM CEC: CM	15	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	22.6 107.5 210.0	10.3 48.9 95.5	24.0Ω/M' 78.7Ω/km	Individual: 18.0Ω/M' 59.1Ω/km Overall: 2.5Ω/M' 8.2Ω/km	.665 16.89	100	78%	12.5	41	22	72.2	
	<b>8178</b>	NEC: CM CEC: CM	18	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	24.6 117.0 238.0	11.2 53.2 108.2	24.0Ω/M' 78.7Ω/km	Individual: 18.0Ω/M' 59.1Ω/km Overall: 2.6Ω/M' 8.5Ω/km	.686 17.42	100	78%	12.5	41	22	72.2	
	<b>8185</b>	NEC: CM CEC: CM	25	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	32.3 160.5 356.0	14.7 73.0 161.8	24.0Ω/M' 78.7Ω/km	Individual: 18.0Ω/M' 59.1Ω/km Overall: 2.4Ω/M' 7.9Ω/km	.822 20.88	100	78%	12.5	41	22	72.2	

<sup>▲</sup>24 AWG stranded TC drain wire

DCR = DC Resistance • TC = Tinned Copper

\*Capacitance between conductors.

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


# Combination Shields

Special Audio, Communication and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

**25 AWG Stranded (7x33) Tinned Copper Conductors • Overall Beldfoil® Shield (100% Coverage) • 25 AWG Stranded TC Drain Wire**


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

 <p>400V 80°C</p> <p>Shorting Fold</p>	<b>8434</b>		2	Shielded: Red & Black	100	30.5	2.1	1.0	.013	.33	.020	.51	.165	4.19	25	82	40	131				
					500	152.4	7.0	3.2														
					U-1000	U-304.8	14.0	6.4														
					1000	304.8	12.0	5.5														

Red/Black pair 100% Beldfoil shielded with drain wire.  
3 copper, 4 copper-covered steel strands in each conductor.


**22 AWG Stranded (7x30) Tinned Copper Conductors • One Pair Beldfoil Shielded (100% Coverage) • Stranded Tinned Copper Drain Wire**


**PVC Insulation • Chrome PVC Jacket (Pair and Single Cabled)**

 <p>300V RMS 90°C</p>	<b>9685</b>	NEC: CM	1.5 (1 pair + 1 single)	Shielded: Black & White	U-1000	U-304.8	24.0	10.9	.013	.33	.032	.81	.199	5.05	60	197	99	325

Meets NEC Article 800  
22 AWG drain wire


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

 <p>200V 80°C</p> <p>24 AWG drain wire</p>	<b>8730<sup>†</sup></b>		2	Shielded: Red & Black	U-1000	U-304.8	24.0	10.9	.008	.20	.030	.76	.205	5.21	34	112	67	220
					1000	304.8	26.0	11.8										

 <p>300V 80°C VW-1</p> <p>24 AWG drain wire</p>	<b>8724<sup>†</sup></b>	NEC: CM CEC: CM	2	Shielded: Red & Black	U-1000	U-304.8	21.0	9.5	.008	.20	.019	.48	.165	4.19	34	112	67	220
					1000	304.8	21.0	9.5										

**22 AWG Stranded (7x30) TC Conductors • Cabled in Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wires**

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

 <p>UL AWM Style 2717 (80°C)</p>	<b>8728</b>	NEC: CM CEC: CM	2	Black & Red	U-500	U-152.4	15.5	7.0	.010	.25	.028	.71	.215	5.46	35	115	62	203				
					500	152.4	15.5	7.0														
					U-1000	U-304.8	30.0	13.6														
					1000	304.8	31.0	14.0														

Meets NEC Article 800  
Each pair Beldfoil shielded with individual drain wire plus polyester film over each shield.

TC = Tinned Copper

\*Capacitance between conductors.

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

† Request Technical Bulletin T/8-21 before planning high and low level circuits in the same cable.

# Combination Shields

Special Audio, Communication and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

**20 AWG** Stranded (7x28) TC Conductors • Conductors Cabled • Beldfoil® Shield as noted (100% Coverage) • 20 or 22 AWG Stranded TC Drain Wire

**Polyethylene Insulation • Chrome PVC Jacket**

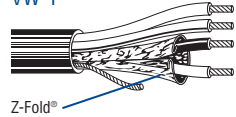
350V 80°C	<b>8763</b>	—	1.5 (1 pair + 1 single)	Shielded: Black & Red  Unshielded: Clear	1000	304.8	25.0	11.4	.014	.36	.028	.71	.210	5.33	26	85	48	157
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Beldfoil shield over Red and Black pair only. Clear conductor is unshielded. 20 AWG drain wire.

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

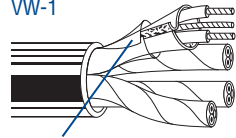
350V 80°C	<b>8722</b>	NEC: CMG CEC: CMG FT4	2	Shielded: Red & Black  Unshielded: Green & White	U-500	U-152.4	18.0	8.2	.015	.38	.028	.71	.226	5.74	60	197	99	325
VW-1					500	152.4	18.5	8.4										
					U-1000	U-304.8	35.0	15.9										
					1000	304.8	36.0	16.4										



Beldfoil shield over Red and Black conductors only. 22 AWG drain wire. Request Technical Bulletin T/8-21 before planning high and low level circuits in the same cable.

**Polypropylene Insulation • Chrome PVC Jacket (Cabled Around a Common Axis)**

400V 105°C	<b>8725</b>	NEC: CM CEC: CM	4	Red & Black; Green & White;  White/Red & White/Black;  White/Green & White/Yellow	500	152.4	38.0	17.3	.015	.38	.030	.76	.345	8.76	27	89	49	161
VW-1					1000	304.8	74.0	33.6										



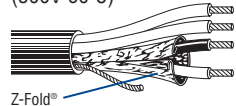
Shorting Fold

Four groups of two conductors with drain wires, each group individually Beldfoil shielded with polyester tape wrap. 22 AWG drain wire.

**20 and 18 AWG** Stranded (7x28 and 16x30) TC Conductors • Beldfoil Shield (100% Coverage) over 20 AWG Pair • 22 AWG Stranded TC Drain Wire

**Polyethylene Insulation • Beige PVC Jacket**

UL AWM Style 2094 (300V 60°C)	<b>9155</b>	NEC: CM CEC: CM	2	1 Shld Black & Red  1 Unshld Green & 18 (16x30) White	500	152.4	22.5	10.2	.020	.51	.031	.79	.262	6.65	24	79	46	151
					U-1000	U-304.8	46.0	20.9										
					1000	304.8	48.0	21.8										
									.019	.48					22	72		



NEC Article 800

TC = Tinned Copper

\*Capacitance between conductors.

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