Precision Video Cable for Analog and Digital

Digital Video Time Code and
Precision Video Twinax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
110 Ohm • 26 AWG Stranded (7x34) .018″ TC Conductors • Twisted Pair • Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire																			
Datalene® Insulation (Color Code: Black, White) • **PVC Jacket** (Chrome or Purple)																			
75°C	**9180**	NEC: CMR CEC: CMG FT4	1000	304.8	10.0	4.5	26 AWG (7x34) .018″ TC 37.3Ω/M′ 122.3Ω/km	.049	1.24	Beldfoil w/Stranded TC Drain Wire 23.1Ω/M′ 75.8Ω/km	.144	3.66	110	76%	13.0	42.7	.38 .77 1.0 1.5 2.0 3.1 4.1 5.6 8.2 11.3 12.3 24.6	.8 1.2 1.3 1.5 1.7 1.9 2.1 2.4 2.8 3.1 3.2 4.2	2.6 4.0 4.3 5.0 5.6 6.3 7.0 8.0 9.3 10.3 10.6 14.0
Shorting Fold																			
Twinax • 124 Ohm • 16 AWG Solid .051″ BC Conductors • Duofoil® (100% Coverage) + TC Braid Shield (90% Coverage)																			
Foam Polyethylene Insulation (Color Code: Clear, Blue) • **Black PVC Jacket**																			
UL AWM Style 2448 (30V 60°C)	**9860**	NEC: CMX CEC: CMX	500 1000 2000	152.4 304.8 609.6	52.0 103.0 202.0	23.6 46.8 91.8	16 AWG (solid) .051″ BC 4.2Ω/M′ 13.8Ω/km	.322	8.18	Duofoil + 90% TC Braid 1.3Ω/M′ 4.3Ω/km	.440	11.18	124	78%	10.9	35.8	1 10 50 100 200 400	.2 .7 1.8 2.9 4.1 6.2	.6 2.3 5.9 9.5 13.5 20.3

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Maximum Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		540 Mb/s		1.5 Gb/s	
Spec:	SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 344M*		SMPTE 292M	
Application:	Composite NTSC		Composite PAL		Component Video		Component Widescreen		Component Widescreen		HDTV	
Part No.	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
1865A	810	247	760	232	600	183	520	158	420	128	170	52
8279	910	277	810	247	640	195	550	168	440	134	170	52
1855A–7787A	1000	305	910	277	750	229	650	198	530	162	210	64
9209	1030	314	930	283	750	229	650	198	540	165	200	61
9209A	1030	314	930	283	750	229	650	198	540	165	200	61
1505A–7794A	1430	436	1320	402	1110	338	960	293	790	241	300	91
1505F	1200	366	1071	326	857	261	732	223	588	179	225	69
1506A	1360	415	1200	366	940	286	810	247	670	204	270	82
9231	1430	436	1270	387	1000	305	850	259	680	207	260	79
9141	1430	436	1270	387	1000	305	850	259	680	207	260	79
8281	1430	436	1270	387	1000	305	860	262	700	213	260	79
8281B	1430	436	1270	387	1000	305	850	259	680	207	250	76
8281F	1250	381	1100	335	860	262	730	222	590	180	240	73
88281	1300	396	1150	351	910	277	770	235	600	183	200	61
1694A–7710A	1760	536	1620	494	1360	415	1180	360	970	296	370	113
1695A	1670	509	1520	463	1250	381	1080	329	880	268	310	94
7855A	2220	677	2000	610	1670	509	1460	445	1210	369	470	143
7731A	2730	832	2460	750	2000	610	1740	530	1430	436	540	165
7732A	2420	738	2140	652	1690	515	1440	439	1150	351	430	131

*Values proposed at time of printing.

The serial digital interconnect standards are designed to operate where the signal loss at 1/2 the clock frequency does not exceed the approximate loss values listed below. The maximum length values shown are based on typical attenuation values for the cables listed and the following criteria:

Maximum length = 30 dB loss at 1/2 the clock frequency: SMPTE 259M, PAL, Widescreen.
Maximum length = 20 dB loss at 1/2 the clock frequency: SMPTE 292M.

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used. Distribution and routing equipment manufacturers should be contacted to verify their maximum recommended transmission.

Return Loss Headroom — Refer to graph on page 19.78.