

MIL-C-17G QPL Cable

Twinax

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

Twinax • 24 AWG Stranded (19x36) .024" Silver-coated High-Strength Copper Alloy Conductor • SCHSCA Braid Shield (93% Coverage)**TFE Teflon® Insulation • Blue PFA Jacket** (Color Code: White, Blue)

200°C	81553	—	500 [†]	152.4	9.0	4.1	24 AWG (19x36)	.084	2.13	SCHSCA 93% Shield Coverage	.129	3.28	77	70%	24.0	78.7	1	1.2	3.9
			1000 [†]	304.8	16.0	7.3	.024" SCHSCA 24.0Ω/M' 78.7Ω/km			7.3Ω/M' 24.0Ω/km							10	4.0	13.1
																	50	9.2	30.2
																	100	13.0	42.7
																	200	18.4	60.4
																	400	26.1	85.6
																	700	34.6	113.5
																	900	39.3	128.9
																	1000	41.4	135.8

M17/176-00002

Twinax • 20 AWG Stranded (7x28) .038" Tinned Copper Conductor • Tinned Copper Braid Shield (85% Coverage)**Polyethylene Insulation • Black Non-contaminating PVC Jacket** (One conductor has bare strand for ID)

85°C	9859	—	1000	304.8	33.0	15.0	20 AWG (7x28)	.158	4.01	TC Braid 85% Shield Coverage	.235	5.97	78	66%	19.7	64.6	1	.7	2.3
							.038" TC 9.5Ω/M' 31.2Ω/km			5.3Ω/M' 17.4Ω/km							10	2.3	7.5
																	50	5.2	17.1
																	100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5

M17/45-RG108

DCR = DC Resistance • PFA = Perfluoroalkoxy • SCHSCA = Silver-coated High-strength Copper Alloy • TC = Tinned Copper • TFE = Tetra Fluoroethylene

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.[†]Spools may contain more than one piece. Minimum length of any one piece is 50 ft. Length may vary ±10% from length shown for spools or reels and ±5% UnReel® cartons. Not RoHS compliant at time of printing. Please check with Belden Technical Support for current compliance information at 1-800-BELDEN-1.

Teflon is a DuPont trademark.

BELDENFor more information, contact Belden Technical Support: **1-800-BELDEN-1** • www.belden.com**Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr**

Computer and Instrumentation Cable

78 Ohm, 95 Ohm and 100 Ohm Twinax

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

78 Ohm • 20 AWG Stranded (7x28) .038" Tinned Copper Conductors • Tinned Copper Braid Shield (93% Coverage)

Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)

UL AWM Style 2092 (300V 60°C)	9272	NEC: CM	100	30.5	4.5	2.0	20 AWG (7x28)	.156	3.96	TC Braid 93% Shield Coverage	.244	6.20	78	66%	19.7	64.6	1	.6	2.0
		CEC: CM	500	152.4	18.5	8.4	.038"			TC							10	2.1	6.9
			1000	304.8	39.0	17.7	9.5Ω/M'			3.4Ω/M'							50	5.0	16.4
			1000	304.8	41.0	18.6	31.2Ω/km			11.2Ω/km							100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5

For Plenum version of 9272, see 89272.
CPE jacket optional.



Plenum • FEP Teflon® Insulation • Blue FEP Teflon Jacket (Color Code: Clear, Blue)

200°C	89272	NEC: CMP	500	152.4	17.0	7.7	20 AWG (7x28)	.148	3.76	TC Braid 93% Shield Coverage	.198	5.03	78	69.5%	18.4	60.4	1	.6	2.0
		CEC: CMP FT6	1000	304.8	38.0	17.3	.038"			TC							10	2.1	6.9
							9.5Ω/M'			3.9Ω/M'							50	5.0	16.4
							31.2Ω/km			12.8v/km							100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5



Suitable for Aerial applications when supported by a messenger.

78 Ohm • 20 AWG Stranded (7x28) .038" Tinned Copper Conductors • Beldfoil® (100% Coverage) + TC Braid Shield (55% Coverage)

Polyethylene Insulation • Blue Sunlight-resistant PVC Jacket (Color Code: Clear, Blue)

UL AWM Style 2464 (300V 80°C)	9463	NEC: CM CL2	100	30.5	4.4	2.0	20 AWG (7x28)	.154	3.91	Beldfoil + 55% TC Braid	.238	6.05	78	66%	19.7	64.6	1	.6	2.0
		CEC: CM	500	152.4	18.0	8.2	.038"			TC							10	2.1	6.9
			1000	304.8	39.0	17.7	9.5Ω/M'			4.1Ω/M'							50	3.6	11.8
			1000	304.8	39.0	17.7	9.5Ω/M'			13.4Ω/km							100	7.5	24.6
			6000	1828.7	234.0	106.1	31.0Ω/km										200	11.0	36.1
			10000	3048.0	380.0	172.4											400	16.0	52.5

CPE jacket optional.



PMSHA P-7K-SC-182141*
Allen Bradley P/N 1770-CD

*10000 ft. and 6000 ft. put-ups also available in Brown, Orange and Purple. 10,000 ft. available in Brown or Orange only.

RG-22B/U • 95 Ohm • 18 AWG Stranded (7x26) .046" Bare Copper Conductors** • Double Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • PE Inner Jacket • Black Non-contaminating PVC Outer Jacket (Color Code: Clear, Clear)

80°C VW-1	9250	—	500	152.4	61.5	27.9	18 AWG (7x26)	.285	7.24	(2) TC Braids 95% Shield Coverage	.416	10.67	95	66%	16.0	52.5	1	.3	1.0
			1000	304.8	121.0	54.9	.046"			BC							10	.9	3.0
							6.6Ω/M'			3.0Ω/km							20	1.3	4.3
							21.5Ω/km										50	2.1	6.9
																	100	3.0	9.8
																	400	6.3	20.7

CPE jacket optional.



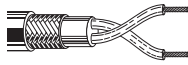
RG-22B/U Type

**1 conductor has tinned center strand. Non-contaminating PVC jacket.

100 Ohm • 20 AWG Stranded (7x28) .037" One Tinned/One Bare Copper Conductors • Duofoil® + Double TC Braid Shield (95% Coverage)

Polyethylene Insulation • Black High-density Polyethylene Jacket

Direct Burial 80°C	9815	—	500	152.4	34.5	15.7	20 AWG (7x28)	.236	5.99	TC Braid 95% Shield Coverage	.330	8.38	100	66%	14.5	47.6	1	.4	1.3
			1000	304.8	69.0	31.4	.037"			(1) TC, (1) BC							10	1.1	3.6
			2000	609.6	134.0	60.9	9.5Ω/M'			6.6Ω/km							50	2.5	8.2
							31.0Ω/km										100	4.1	13.5
																	200	6.4	21.0
																	400	10.2	33.5



BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • PE = Polyethylene • TC = Tinned Copper

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

*Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.

†Final put-up may vary from length shown. ±10% for spools or reels, ±5% for UnReel® cartons.

Teflon is a DuPont trademark.

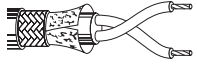
Computer and Instrumentation Cable

100 Ohm, 124 Ohm and 150 Ohm Twinax

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

100 Ohm • 20 AWG Stranded (7x28) .037" One TC/One BC Conductor • Duofoil® (100% Coverage) + TC Braid Shield (86% Coverage)

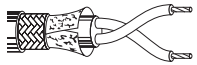
Polyethylene Insulation • Polyethylene Inner Jacket • Black PVC Outer Jacket

	9207 NEC: CM CL2 CEC: CMG FT4	100	30.5	7.1	3.2	20 AWG	.236	5.99	Duofoil	.330	8.38	100	66%	14.5	47.6	1	.3	1.0	
		U-500	U-152.4	33.0	15.0	(7x28)		+86%									10	1.2	3.9
		500	152.4	34.5	15.7	.037"		TC Braid									50	2.8	9.2
		1000	304.8	68.0	30.9	(1) TC,		1.7Ω/M'									100	4.1	13.5
		1640	500.0	111.5	50.7	(1) BC		5.7Ω/km									200	6.4	21.0
		2000	609.6	136.0	61.8	9.5Ω/M'											400	10.2	33.5
		3280	1000.0	219.8	99.9	31.0Ω/km													

IBM P/N 7362211

100 Ohm • 20 AWG Stranded (7x28) .037" One TC/One BC Conductor • Duofoil (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Black FEP Jacket

	89207 NEC: CMP CEC: CMP FT6	100	30.5	6.7	3.0	20 AWG	.201	5.11	Duofoil	.259	6.58	100	69.5%	14.0	46.0	1	.3	1.0	
		U-500	U-152.4	26.0	11.8	(7x28)		+85%									10	1.2	3.9
		500	152.4	26.0	11.8	.037"		TC Braid									50	2.8	9.2
		1000	304.8	55.0	25.0	(1) TC, (1) BC		2.5Ω/M'									100	4.1	13.5
						9.5Ω/M'		8.2Ω/km									200	6.4	21.0

IBM P/N 7362211

124 Ohm • 25 AWG Stranded (7x33) .021" Tinned Copper Conductors • Beldfoil® Shield (100% Coverage) • Stranded TC Drain Wire

Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)

	9271 UL AWM Style 2092 (300V 60°C) Shorting Fold	100	30.5	3.2	1.5	25 AWG	.170	4.32	Beldfoil	.240	6.10	124	66%	12.2	40.0	1	.6	2.0	
		U-500	U-152.4	12.5	5.7	(7x33)		12.0Ω/M'									10	1.7	5.6
		500	152.4	27.0	12.3	.021"		39.4Ω/km									50	3.6	11.8
		1000	304.8	28.0	12.7	TC											100	5.0	16.4
						31.8Ω/M'											200	6.9	22.6

Shorting Fold


124 Ohm • 16 AWG Solid .051" Bare Copper Conductors • Duofoil (100% Coverage) + Tinned Copper Braid Shield (90% Coverage)

Foam Polyethylene Insulation • Black PVC Jacket (Color Code: Clear, Blue)

	9860 UL AWM Style 2448 (30V 60°C) VW-1	500	152.4	52.0	23.6	16 AWG	.322	8.18	Duofoil	.440	11.18	124	78%	10.9	35.8	1	.2	.6	
		1000	304.8	103.0	46.8	(solid)		+90%									10	1.7	2.3
		2000	609.6	202.0	91.8	.051"		TC Braid									50	2.8	5.9
						BC		1.3Ω/M'									100	2.9	9.5
						4.2Ω/M'		4.3Ω/km									200	4.1	13.5


150 Ohm • 22 AWG Stranded (19x34) .031" Tinned Copper Conductors • Duofoil Shield (100% Coverage) • Stranded TC Drain Wire

Datalene® Insulation • Black PVC Jacket (Color Code: Black, Yellow)

	9182 UL AWM Style 2668 (30V 60°C) VW-1	U-500	U-152.4	21.5	9.8	22 AWG	.275	6.98	Duofoil	.345	8.76	150	78%	8.8	28.9	1	.4	1.3	
		500	152.4	23.0	10.4	(19x34)		6.3Ω/M'									10	1.2	3.9
		1000	304.8	44.0	20.0	.031"		20.7Ω/km									50	2.7	8.7
						TC											100	4.3	14.1
						14.0Ω/M'											200	6.2	20.3

Shorting Fold

Plenum • Foam FEP Teflon Insulation • Black FEP Teflon Jacket (Color Code: Black, Yellow)

	89182 NEC: CMP CL2P CEC: CMP FT6	100	30.5	6.4	2.9	22 AWG	.278	7.06	Duofoil	.307	7.80	150	78%	8.8	28.9	1	.4	1.3	
		500	152.4	28.0	12.7	(19x34)		6.3Ω/M'									10	1.2	3.9
		1000	304.8	53.0	24.1	.031"		20.7Ω/km									50	2.7	8.7
						TC											100	4.3	14.1
						14.0Ω/M'											200	6.2	20.3

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

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

Teflon is a DuPont trademark.

BELDEN

For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr

Precision Video Cable for Analog and Digital

Digital Video Time Code and Precision Video Twinax

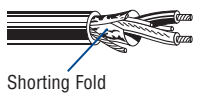


Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	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 1.7 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	
	SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 344M*		SMPTE 292M	
Spec:	Composite NTSC		Composite PAL		Component Video		Component Widescreen		Component Widescreen		HDTV	
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.



For more information, contact Belden Technical Support: **1-800-BELDEN-1** • www.belden.com

Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr