

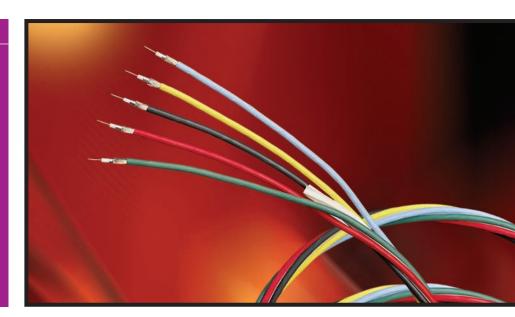
New Product Bulletin

NP 251

Banana Peel® Component Video Cables

By affixing the individual coax cables to a center spline and eliminating the outer jacket, these Brilliance® Banana Peel component video cables cut installation labor/costs.

Precise 75-ohm impedance offers end-users optimized whole-system performance.



Belden® Brilliance® Banana Peel Hi-Res Component Video Cables Provide Optimum Performance and Reduce Installation Time/Labor The RGB standards were designed to address analog video's ability to capture and transmit complex moving images, loaded with information, utilizing analogonly equipment and frequency-limited cables. Most RGB cables available today are still designed for these outdated standards, formats and frequencies.

Precision analog video cables provide greater signal integrity, delivering a better picture than typical RGB transmissions. Digital video and HDTV run at still higher frequencies and make even better use of component video for still greater picture clarity.

To accommodate the need for higher frequency, longer distance transmissions and the ability to run more demanding applications such as high resolution VGA on large screens, HDTV, Hi-Res CAD, animation, editing and special effects, a true 75-ohm, high frequency cable with optimum design features is needed. Belden Brilliance Mini Hi-res Component Video cables meet these new high-end requirements. The unique design of these cables also makes them ideal for multiple runs of composite video signals such as SDI or HDTV (video snake cable).

To meet the needs of the installer, these cables are now available in a Banana Peel composite cable configuration.

Banana Peel Constructions Offer Many Labor Saving and Easy-Identification Features

Banana Peel Hi-Res Composite Video cables will decrease your labor costs because the overall jacket has been eliminated. Without the overall jacket, a whole step in the termination process has been removed, plus the individual cable components are all instantly identifiable (the individual cables are color-coded and the print legends are immediately visible). And, these cables are ready for termination — just peel the individual cables off the center spline and terminate. The elimination of the overall jacket also means that the composite has a smaller diameter, so the cable's overall bend radius is improved and use of a smaller size conduit is possible.

Unprecedented Flexibility And Workability

Bundled coax cables are notoriously stiff, especially when rated for plenum use, and the jackets of traditional CMP-rated, jacketed RGB cables are also notoriously difficult to strip for termination. Banana Peel RGBs overcome both these objections.

Banana Peel Hi-Res Component Coax bundles hold together without an overall jacket, making them markedly more flexible than jacketed versions. And instead of using a fluorocopolymer jacket that makes the individual coaxes difficult to dress, plenum styles 1282 and 1283 have plenum-rated PVC Flamarrest* individual jackets.



Two Sizes Available to Cover Any Distance and Fill Any Need

Banana Peel® Hi-Res Component Video Cables are available in two sizes:

25 AWG: Series 1281 and 1282 Series bundled cables are comprised of Mini RG-59 coaxes. Series 1281 cables are CMR-rated, Banana Peel versions of Belden's extremely popular 1279R jacketed styles. Series 1282 cables are CMP-rated, Banana Peel versions of 1279P jacketed styles.

Series 1281 and 1282 are enhanced versions of traditional RGB cables and feature 25 AWG solid copper center conductors for lower attenuation and easier termination, flexible PVC jackets and high frequency Beldfoil* foil shields that are used in combination with Belden's unique interlocked serve copper shield for 100% coverage. This unique shielding design also prevents the shields from bunching up when flexed, yet the shield is easier to comb out than a full braid.

Series 1281 and 1282 cables are sweep tested to 850 MHz and their Return Loss levels are fully documented and guaranteed. Depending on the horizontal scan rate, unamplified SVGA signals can be transmitted 150 to 180 feet over 1281 and 1282 Series cables – based on a 6dB loss budget.

Older RGB-style cables are ill suited for today's high frequency analog and digital transmissions. 1279 jacketed styles, and the new 1281 and 1282 styles, are the upgrade you need — especially since they are compatible with older, standard RGB-style connectors and tooling.

20 AWG: Series 1283 bundled cables are comprised of RG-59 style Plenum-rated Precision Video coaxes. Based on Belden* 1506A, these cables feature 20 AWG solid copper center conductors, Beldfoil foil shields in combination with 95% bare copper braid shields, and flexible PVC jackets rated for plenum use. Since these cables are based on 1506A, installers can also use the standard 1506A connectors and tools.

These cables are sweep tested for Return Loss and are fully documented and guaranteed.

Depending on the horizontal scan rate, unamplified SVGA signals can be transmitted 330-390 feet — based on a 6dB loss budget.

1283 Series cables replace Belden 1824A and 1826A which were discontinued. The non-plenum alternatives, 7794A-7798A, are only available in jacketed versions at this time.

Applications

Brilliance* Banana Peel Hi-Res Component Video cables are ideal for high-resolution monitor and projection imaging in the following situations/facilities:

- Corporate boardrooms
- · Command and control centers
- Multi-purpose auditoriums
- Teleconferencing centers
- · Home theater
- Performance venues
- Post-production facilities
- Houses of worship

Connector and Tool Availability

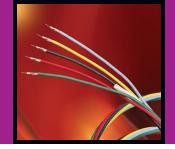
Manufacturer	Style	Part No. 1281, 1282 Styles	Part No. 1283 Styles
ADC	BNC	BNC-16	BNC 6
Belden	BNC RCA	1B25A 1R25A	_ _
	Stripping Tool Compression Tool	HCST HCCT	_
ICM	RCA	FSRCA-1RGB	_
Kings	BNC	2065-25-9	2065-2-9
Trompeter	BNC	105-2053-9	UPL-2000-DB

Maximum Recommended Transmission Distance (without using an interface)

Resolution	VG	A-640 x 4	180	SVG	A-800 x	600	XGA	-1024 x	768	SXG/	√-1280 x	1024	UXGA	-1600 x	1200	RGB	HDTV*
Image Refresh Rate (Hz)	60	75	85	60	75	85	60	75	85	60	75	85	60	75	85	30	30
Horizontal Scan Rate (KHz)	28.8	36.5	40.8	36	45	51	46.1	57.6	65.3	61.4	76.8	87	72	90	102	14.5	32.4
Primary Bandwidth Frequency (MHz)	9.2	11.7	31.1	14.4	18.0	20.4	23.6	29.5	33.4	39.3	49.2	55.7	57.6	72.0	81.6	3.3	31.1
BW (MHz) -3dB Nom. for 0.5 dB flatness	41.4	52.7	59.0	64.8	81.0	91.8	106.2	132.8	150.3	176.9	221.4	250.7	259.2	324.0	367.2	14.9	140
BW (MHz) -3dB Nom. for 0.1 dB flatness	91.1	114.7	129.7	142.6	178.2	202.0	233.6	292.1	330.7	389.1	487.1	551.4	570.2	712.8	807.8	32.7	307.9
Part Number	Maximum Recommended Transmission Distance (in feet) at -3dB and .1dB flatness																
1281R and 1282P Series	64	56	53	50	44	41	38	34	31	29	25	24	23	21	19	112	33
1283\$3-1283\$6	111	98	92	87	78	73	67	60	56	51	46	43	42	37	35	190	58
Part Number	Maximum Recommended Transmission Distance (in feet) -3dB and at .5dB flatness																
1281R and 1282P Series	98	86	81	77	68	64	59	52	48	44	39	37	36	32	30	172	50
1283\$3-1283\$6	168	148	139	133	118	110	102	91	85	78	69	65	64	57	53	289	88

^{*}HDTV per SMPTE 240M Television -

Signal Parameters -1125 Line High-Definition Production Systems.

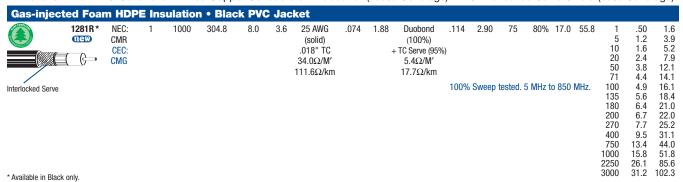


Mini Hi-Res Component Video Cable

Single Coax and Banana Peel® Unjacketed Coax Bundled, CM, CMR and CMP Rated

Doggrintion	Part	UL NEC/ C(UL) CEC	No.		dard gths	Stan Unit V		Conductor (stranding)		inal OD	Shielding	Nomir	nal OD	Nom.	Nom. Vel.	Nomin Capacita			inal Jatio	
Description	No.		Cond.	Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Materials Nom. DCR	Inch	mm		of Prop.	pF/Ft. p	F/m	MHz dE		dB/ 100m

Miniature • 25 AWG Solid .018" Tinned Copper Conductors • Duobond® (100% Coverage) + TC Interlocked Serve Shield (95% Coverage)



	1282P*	NEC:	1	1000	304.8	10.0	4.5	25 AWG	.074	1.88	Duobond	.114	2.90	75	81%	17.0	55.8			
	new	CMP						(solid)			(100%)							1	.50	1.6
Samuel		CEC:						.018" TC			+ TC Serve (95%	n)						5	1.2	3.9
		CMP FT6						31.8Ω/M'			$5.8\Omega/M'$							10	1.6	5.2
								104.3Ω /km			$19.0\Omega/km$							20	2.4	7.9
																		50	3.8	12.1
erlocked Ser	ve											100%	Sweep	tested.	5 MHz t	o 850	MHz.	71	4.5	14.8
torioonou ooi	••											.007	оттоор	tootou.	0 111112			100	5.2	17.1
																		135	5.9	19.5
																		180	6.8	22.2
																		200	7.1	23.1
																		270	8.2	26.9
																		400	10.0	32.9
																		750	14.3	47.0
	la alo a alo																	1000	16.9	55.4
vailable in B	аск опіў.																	2250	25.5	83.6
																		3000	33.9	111.3

Miniature • 25 AWG Solid .018" Bare Copper Conductors • Duobond® (100% Coverage) + TC Interlocked Serve Shield (95% Coverage)

Foam HDP	E Insu	lation •	PVC	Jack	ets in	Color	s (Se	e Chart) •	5 Bu	ndles	Also in	All Black	Center Spline Bi	nder		
Interlocked Serve	1281\$3	NEC: CMR CEC: CMG	3	500† 1000†	152.4 304.8	24.2 45.6	11.0 20.7	25 AWG (solid) .018" TC 34.0Ω/M′ 106.3Ω /km	.074	1.88	Duobond (100%) •TC Serve (95% 5.4Ω/M' 17.7Ω/km	.246 6.2	75 80% 17.0 55.8 tested. 5 MHz to 850 MHz.	1 5 10 20 50 71 100 135	.50 1.2 1.6 2.4 3.8 4.4 4.9 5.6	1.6 3.9 5.2 7.9 12.1 14.1 16.1 18.4
monocked octive	1281S4 (TEW)	NEC: CMR CEC: CMG	4	1000†	304.8	57.0	25.9	same as above	.074	1.88	same as above	Single: .114 2.9 Overall: .275 7.0		180 200 270 400 750	6.4 6.7 7.7 9.5 13.4	21.0 22.0 25.2 31.1 44.0
	1281\$5 (TEW)	NEC: CMR CEC: CMG	5	500† 1000†	152.4 304.8	38.5 76.0	17.5 34.5	same as above	.074	1.88	same as above	Single: .114 2.9 Overall: .308 7.8	_	1000 2250 3000	15.4 15.8 26.1 31.2	51.8 85.6 102.3
	1281S6 TEW	NEC: CM CEC: CMG	6	500† 1000†	152.4 304.8	41.8 82.7	19.0 37.6	same as above	.074	1.88	same as above	Single: .114 2.9 Overall: .342 8.7				

 $^{\dagger}\text{Spools}$ are one piece, but length may vary ±10% from length shown.

 $\label{eq:decomposition} DCR = DC \ Resistance \ \bullet \ FPFA = Foam \ Perfluoroalkoxy \ \bullet \ HDPE = High-density \ Polyethylene \ \bullet \ TC = Tinned \ Copper \ Polyethylene \ \bullet \ TC = Tinned \ Copper \ Polyethylene \ Poly$

Contact the Belden Customer Service Department for a more Comprehensive Connector Cross Reference. 1.800.BELDEN.1. Request quotations of cables not listed.



Mini Hi-Res Component Video Cable

Banana Peel® Unjacketed Coax Bundled, Plenum Rated

Description	Part	UL NEC/ C(UL) CEC	No.		idard gths		dard Veight	Conductor (stranding)		inal e OD	Shielding Materials	Nomin	nal OD	Nom. Imp.	Nom. Vel.	Nominal Capacitance	Nomina Attenuat	
Description	No.		of Cond.	Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Nom. DCR	Inch	mm		of Prop.	pF/Ft. pF/m	MHz dB/ 100 Ft.	dB/ 100m

Miniature • 25 AWG Solid .018" Tinned Copper Conductors • Duobond® (100% Coverage) + TC Interlocked Serve Shield (95% Coverage)

Plenum • F	oam FE	P Insul	ation •	Flama	ırrest®	Jacke	ts in	Colors (Se	ee Cha	rt) • 5	Bundles	Also in All	Black •	Center	Spline	Binder	
aterlocked Serve	1282S3 • (TEW)	NEC: CMP CEC: CMP	3	500 1000	152.4 304.8	21.9 42.8	10.0 19.5	25 AWG (solid) .018" TC 31.8Ω/M' 104.3Ω/km	.074	1.88	Duobond (100%) + TC Serve (95% 5.8Ω/M' 19.0Ω/km	Single: .114 2.9 6) Overall: .246 6.2	75	81% 17.0		1 .50 5 1.2 10 1.6 20 2.4 50 3.8 71 4.5 100 5.2 135 5.5	3.9 5.2 7.9 12.1 5 14.8 2 17.1 9 19.5
	1282S4 (TEW)	NEC: CMP CEC: CMP	4	500 1000	152.4 304.8	25.7 50.4	11.7 22.9	same as above	.074	1.88	same as above	Single: .114 2.9 Overall: .275 7.0		Sweep teste to 850 MHz		180 6.8 200 7.1 270 8.2 400 10.0 750 14.3	23.1 2 26.9 32.9
	1282S5 (TEW)	NEC: CMP CEC: CMP	5	500 1000	152.4 304.8	33.3 65.6	15.1 29.8	same as above	.074	1.88	same as above	Single: .114 2.9 Overall: .308 7.8			10 2:	000 16.9 250 25.5 000 33.9	55.4 83.6
	1282S6 (TEV)	NEC: CMP CEC: CMP	6	500 1000	152.4 304.8	39.0 76.0	17.7 34.5	same as above	.074	1.88	same as above	Single: .114 2.9 Overall: .342 8.7					

Hi-Res RG-59/U Type Component Video Cable

Banana Peel® Unjacketed Coax Bundled, Plenum Rated

December	Part	UL NEC/ C(UL) CEC	No.		dard gths		dard Veight	Conductor (stranding)		inal OD		Nomi	nal OD	Nom.	Nom. Vel.	Nom Capac	ninal itance	At	Nomina Itenuati		
Description	No.		of Cond.	Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Materials Nom. DCR			inip. (Ω)	of			MILL-		dB/ 100m	

20 AWG Solid .032" Bare Copper Conductors • Duofoil® (100% Coverage) + TC Braid Shield (95% Coverage)

Foam FEP	Insulati	ion •	Flamarre	st [®] Jackets	s in Co	olors	(See Chart)	• 5 a	nd 6	Bundles	Also in All l	Black • Center Sp	oline Bi	nder	
300V RMS	1283S3 (1EW)	NEC: CMP CEC: CMP	-	500 152.4 000 304.8	60.0 119.0	27.3 54.0	20 AWG (solid) .032" BC $10.0\Omega/\text{M}'$ 32.8 Ω/km	.133	3.38	Duofoil (95%) + TC Braid 5.4Ω/M' 17.7Ω/km	Single: .196 4.8 Overall: .422 10.7	75 84% 16.1 52	3.6 10 71.5 135 270 360 540 720	.3 .6 1.1 2.3 3.2 4.6 5.3 6.4 7.3	1.0 2.0 3.4 7.4 10.5 14.9 17.2 21.0 23.9
	1283S5 (TEW)	NEC: CMP CEC: CMP		500 152.4 000 304.8		51.0 102.0	same as above	.133	3.38	same as above	Single: .196 4.8 Overall: .529 13.4	100% Sweep tested. 5 MHz to 3 GHz.	750 1000 1500 2500	7.5 9.4 12.8 17.5	24.6 30.8 42.0 57.4
	1283S6 (11EW)	NEC: CMP CEC: CMP	-	500 152.4 000 304.8	129.0 257.0	58.6 116.8	same as above	.133	3.38	same as above	Single: .196 4.8 Overall: .588 14.9		3000	21.9	71.8

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

Contact the Belden Customer Service Department for a more Comprehensive Connector Cross Reference. **1.800.BELDEN.1**. Request quotations of cables not listed.

Color Code Chart:

Cond.	Color	Cond.	Color
1	Red	4	Yellow
2	Green	5	Black
3	Blue	6	White