

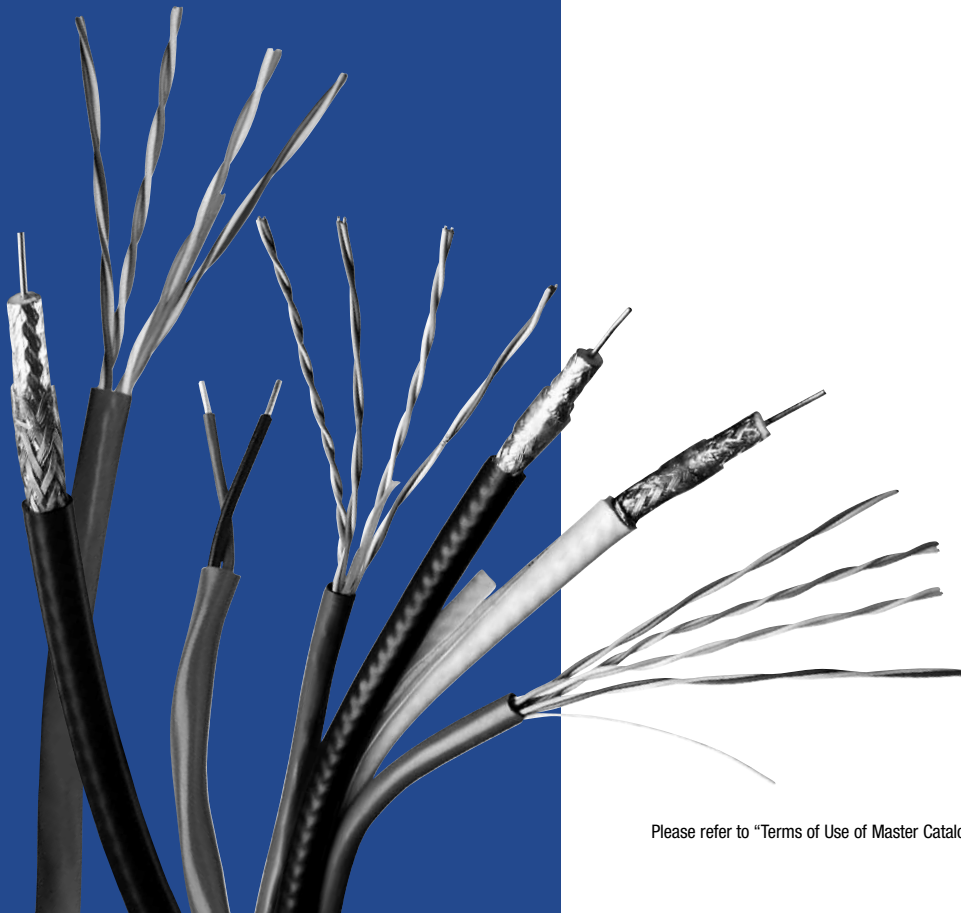


Residential Cables

21

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Introduction



A House is More than a Home.

The intelligent home is here – a living, working, entertaining, learning place. Cables tie the whole experience together providing high quality, superior performance, proven reliability and wide choice to meet all the needs of changing technology and the demands of the discerning consumer.

Key Applications

- Home office
- Audio/video
- Climate control
- Window shade automation
- Lighting

Special Features

Every Belden cable (and connector) is subject to the industry's most rigorous quality control process.

- **High-Performance, Easy-to-Install Cables and Connectors**
Individual or single application cables are available for any data, video, audio, control or security need, including:
 - Category 5e UTP and optical fiber cables for multimedia, voice, video and data use.
 - Coax cables for HDTV, DBS, CATV, SVHS, CCTV, S-Video, SPIF and cable modem applications.
 - High-conductivity (oxygen-free) speaker cables for audio distribution.
 - Paired, unshielded cables for control applications.
 - Non-category, Cat 5e and Cat 6 low skew performance UTP cables for video signals over twisted pair cables.
 - One-piece connectors and tools that facilitates fast and easy cable connection.
- **Belden also Offers Several Different Composite Cables.**
Composite cables simplify a multiple use installation by combining Belden data cables, coaxial cables, paired and multi-conductor cables and fiber optic cables in a single-pull product.

Installation of these cables means that residential properties will be "future-proof" – ready to embrace the next generation of home entertainment and new technology. This makes a property more saleable and more attractive to the buyer.
- **Time-tested and Preferred in other Industries**
Many Belden Residential cables in this catalog have been long-standing leaders in other industries such as:
 - **Computer Networks**
Where Belden offers the most innovative cables and the leading data cable technology worldwide.
 - **Broadcast**
Where network studios prefer Belden over any other cable for picture-perfect quality and professional audio technicians demand Belden for crystal-clear audio quality.

- **Broadband CATV**
Where Belden Duobond® Plus (tri-shield) cables have consistently outperformed the more elaborate quad-shielded cables.
- **Alarm/Security**
Where Belden has been a favorite among installers for many years.

Now, these industry-leading and time-tested cables are available, along with many new innovations, for wiring the home of the 21st Century...only from Belden.

- **Better Design and Better Performance**
Some unique high performance technologies are used in the manufacture of the various cables, including:
 - **Bonded-Pair Data Cables to Provide the Assurance of Installable Performance™**
With patented bonded-pair design, the cables are able to withstand the rigors of a typical installation without any degradation in performance. This means, for example, that the Cat 5e cable will not only meet the Cat 5e specifications before installation but, more importantly, it will continue to meet them after installation.
 - **Coax Cables with Belden's Exclusive Duobond® Plus Shielding**
Duobond® Plus consists of a Duofoil® II (foil tape) surrounded by an 80% braid and an outer layer of foil with a shorting fold. This unique construction provides optimum shielding effectiveness.
 - **Composite Cables – Without a Jacket**
Belden Banana Peel® composite cables feature a patent-pending design that eliminates the need for an overall jacket, making the cables easy to handle, identify, pull and terminate. All that is necessary is to peel the cables off the center spline. These cables are increasingly used for multiple installations in new homes.
- **BNC and RCA Connectors**
One-piece BNC and RCA connectors feature a solid, one-piece brass and nickel-plated construction with gold-plated center pins. They are recommended for mini hi-res video cables:
 - 1277R-1280R
 - 1281R
 - 1281S3-S6

To ensure proper connection an easy-to-use compression tool and a stripping tool is available.
- **Multimedia Control Cable**
1502R is a multimedia touch panel control cable for modern audio-video (A/V) and building management systems. When used in conjunction with a touch panel control, these cables improve user comfort and convenience, security and personal enjoyment.
- **Enhanced Sound Performance**
The copper conductors of Brilliance low cap OFHC speaker cable have been manufactured using an upright shaft manufacturing process. The result of this process is a high-conductivity copper conductor that is inherently free of impurities. Exceptional sound clarity is also achieved by using polyolefin insulation, a much better dielectric than traditional PVC. The low capacitance of this insulation material provides the cable with a superior high frequency response and the facility for extended distance runs.

Introduction



• Easy Installation

Easy installation features include the following:

- Brightly colored jackets for easy identification
- Print legends that facilitate location identification (Room 12345, Zone ABCDE)
- Cable jackets with ascending/descending sequential markings at 0.6 m intervals
- Extremely flexible, easy-to-pull constructions (highly stranded conductors; PVC)

Brilliance® VideoTwist® UTP Cables

To meet the new video/data UTP requirements, Belden has designed a new series of cables. High resolution videos require high performance cables that have low signal skew and low return loss. Typically, these systems use bundled coax for the cable interconnection. Increasingly, however, system designers are turning to unshielded twisted pair (UTP) transmission equipment to distribute component RGB video because UTP is cheaper than coax. UTP cables also mean that the same cable can be used for premise LAN wiring – eliminating the need for two separate cables.

Brilliance VideoTwist® UTP cables offer the best low skew and return loss performance in the marketplace and are designed for quality video applications – plus they meet applicable TIA/EIA standards for data transmissions. The cables dramatically reduce installation costs but retain the appearance, feel and familiarity of a standard category twisted pair cable.

	Nominal Skew (ns/100 m)	Video Transmisson Distance*	
		ft.	m
Typical UTP Data Cables	25 - 45	370 - 520	112 - 158
RGB Coax Cables	15.0	850	259
VideoTwist® 7987	2.2	5900	1798
VideoTwist® 7988	9.0	1475	450
VideoTwist® 7989	10.0	1300	396

* Based on Broadcast standard of 40nd maximum total skew and the use of amplification equipment.

Security

Belden's answer to this challenge is a broad line of security cables which can be found in the New Generation section 20 in this catalog.

Everything you Need for the Intelligent Home

These structured cabling products for the intelligent home are all brought to you by Belden – the most innovative and trusted manufacturer in the cable industry. Belden offers the most comprehensive, time-tested and proven products for cabling the home.

Availability

Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a Residential cable in this catalog section that meets your technical requirements, see our U.S. Master Catalog or contact technical support at +31-77-3875-414 or techsupport.venlo@belden.com.

Corresponding Literature

Product Bulletins

NP185: Multimedia control cables (1502R)

NP212: Brilliance® VideoTwist® UTP low skew cables

NP229: BNC and RNC connectors

NP232: Brilliance® low cap OFHC speaker cables

Composite Data, Audio, Video, Security and Control Cables

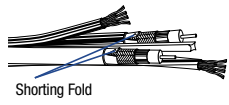
Banana Peel® Jacketless Cables

Category 5e



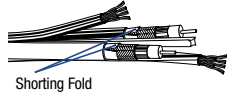
De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Color Code	Nominal Insulation OD		Compo- nent	Description	Shielding Material & Nom. DCR	Insulation Material & Colors	Component Jacket Material & Colors	Core OD	
			ft.	m	lbs.	kg		inch	mm						inch	mm

Composite • **(2) Cat 5e** 4-Bonded-Pair UTP 24 AWG • **(2) Series 6 Coax** with **Duobond® Plus** (Bonded Tri-Shield) •
Banana Peel® Unjacketed, Bonded to Central Spine

Polyolefin Insulation (Pairs) • Gas-Injected FPE Insulation (Coax) • F-R PVC Jacket • No Overall Jacket															
7876S	NEC:	500	152	63.1	28.6	0.550	13.97	2xData	4-Pair UTP Bonded-Pairs 24 AWG 0.5 mm Solid BC	Unshielded	Polyolefin	F-R PVC (1) Blue (1) Green	0.204	5.18	
	CMR:	1000	305	119.0	54.0										
	CEC:														
	CMG FT4														
															
								2xCoax	Series 6 18 AWG 1.0 mm Solid BC	Duobond® Plus + 77% AL Braid + AL Foil w/shorting fold	Gas-Injected Foam Polyethylene	F-R PVC (1) Black (1) White	0.275	6.99	

Third party verified to TIA/EIA-568-B.2, Category 5e
 U.S. Patents 7,049,523; 5,606,151; 5,734,126.
 Coax sweep tested to 3.0 GHz and jacket sequentially marked.
 Coax shield effectiveness 125 dB @ 1 GHz is better than quad shield.

Composite • **(2) Cat 5e** 4-Bonded-Pair UTP 24 AWG • **(2) Series 6 Coax** with **Duobond® Plus (1) 2-Fiber LANlite®** •
Banana Peel® Unjacketed, Bonded to Central Spine

Polyolefin Insulation (Pairs) • Gas-Injected FPE Insulation (Coax) • F-R PVC Jacket • No Overall Jacket															
7878S	NEC:	500	152	70.8	32.1	0.595	15.11	2xData	4-Pair UTP Bonded-Pairs 24 AWG 0.5 mm Solid BC	Unshielded	Polyolefin	F-R PVC (1) Blue (1) Green	0.204	5.18	
	CMR OF	1000	305	136.9	62.1										
	CEC:														
	CMG OF FT4														
															
								2xCoax	Series 6 18 AWG 1.0 mm Solid BC	Duobond® Plus + 77% AL Braid + AL Foil w/shorting fold	Gas-Injected Foam Polyethylene	F-R PVC (1) Black (1) White	0.275	6.99	
								2xFiber LANlite®	Gigabit Ethernet 62.5µ/125µ/900µ (core/clad/coating) Tight-Buffered		PVC (1) Blue (1) Orange	F-R PVC (1) Orange	0.175	4.45	

Third party verified to TIA/EIA-568-B.2, Category 5e
 U.S. Patents 7,049,523; 5,606,151; 5,734,126.
 Coax sweep tested to 3.0 GHz and jacket sequentially marked.
 Coax shield effectiveness 125 dB @ 1 GHz is better than quad shield.

BC = Bare Copper • AL = Aluminum • DCR = DC resistance

Duobond® Plus see technical information page 23.13.

Color Code

Pair No.	Color
1	White/Blue Stripe, Blue
2	White/Orange Stripe, Orange
3	White/Green Stripe, Green
4	White/Brown Stripe, Brown

Composite Data, Audio, Video, Security and Control Cables

Banana Peel® Jacketless Cables

Category 5e



De- scription	Part No.	UL NEC/ C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Color Code	Nominal Insulation OD		Compo- nent	Description	Shielding Material & Nom. DCR	Insulation Material & Colors	Component Jacket Material & Colors	Core OD	
			ft.	m	lbs.	kg		inch	mm						inch	mm

Composite • (1) NanoSkew™ 4-Non-Bonded-Pair UTP 24 AWG • (1) RG59 Coax with Duofoil® (1) 1502R •
Banana Peel® Unjacketed, Bonded to Central Spline

Polyolefin Insulation (Pairs) • Gas-Injected FPE Insulation (Coax) • Polyolefin Insulation (Control) • F-R PVC Jacket • No Overall Jacket																
	YR48902	NEC CMR OF CEC CMG OF FT4	1000	305	132.3	60.0		0.595	15.11	1xData 7987R	4-Pair UTP Non-Bonded-Pairs 24 AWG 0.5 mm Solid BC	Unshielded	Polyolefin	F-R PVC	0.195	4.95
										1xCoax 1505A	0.8 mm 20 AWG Solid BC	Duofoil® 100% 95% TC Braid	Gas-Injected HPDE	F-R PVC Black	0.233	5.92
											1xControl 1502R	1-Pair 22 AWG 0.8 mm (7x30) TC 2 Conductors 18 AWG 1.2 mm (16x30) TC	Unshielded	Foam HPDE	F-R PVC Green	0.250

Third party verified to TIA/EIA-568-B.2, Category 5e
Coax sweep tested to 2.25 GHz and jacket sequentially marked.

(6) Cat 5e 4-Bonded-Pair UTP 24 AWG • Solid 0.5 mm BC • Rip Cord • Banana Peel® Unjacketed, Bonded to Central Spline

Polyolefin Insulation • Numbered F-R PVC Jackets (Light Blue or Grey) • No Overall Jacket																
	1700S6	CMR CMG	500	152	77.6	35.2		0.600	15.24	6xData	4-Pair UTP Bonded-Pairs 24 AWG 0.5 mm Solid BC	Unshielded	Polyolefin	F-R PVC	0.204	5.18
			1000	305	149.3	67.7										

6x4 Pairs

1-20 MHz Ohm 100 + 12%
21-100 MHz + 15%
101-155 MHz + 18%
156-310 MHz + 20%
311-350 MHz + 22%

Third party verified to TIA/EIA-568-B.2, Category 5e

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

Duofoil® see technical information page 23.13.

Color Code

Pair No.	Color
1	White/Blue Stripe, Blue
2	White/Orange Stripe, Orange
3	White/Green Stripe, Green
4	White/Brown Stripe, Brown

Composite Data, Audio, Video, Security and Control Cables

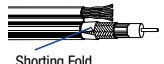
Siamese Cables

Category 5e and Category 5




De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Color Code	Nominal Insulation OD		Compo- nent	Description	Shielding Material & Nom. DCR	Insulation Material & Colors	Component Jacket Material & Colors	Core OD	
			ft.	m	lbs.	kg		inch	mm						inch	mm

Composite • **(1) Cat 5e** 4-Bonded-Pair UTP 24 AWG • **(1) Series 6 Coax** with **Duobond® Plus** Bonded Tri-Shield

Polyolefin Insulation (Pairs) • Gas-Injected FPE Insulation (Coax) • Overall Green F-R PVC Jacket																
	7911A	NEC:	500	152	35.1	15.9		0.275	6.99	1xData	4-Pair UTP	Unshielded	Polyolefin	F-R PVC (1) Green	0.200	5.08
		CMR:	1000	305	60.0	27.2		x	x		Bonded-Pairs					
		CEC:						0.529	13.44		24 AWG					
		CMG FT4									0.5 mm					
										1xCoax	Series 6	Duobond® Plus	Gas-Injected	F-R PVC	0.275	6.99
											18 AWG	+ 77% AL	Foam	(1) Green		
											1.0 mm	Braid	Polyethylene			
											Solid BC	+ AL Foil				
												w/shorting fold				

Third party verified to TIA/EIA-568-B.2, Category 5e
Coax sweep tested to 3.0 GHz and jacket sequentially marked.
Coax shield effectiveness 125 dB @ 1 GHz is better than quad shield.

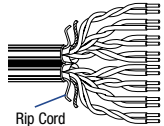
Composite • **(1) Cat 5** 4-Pair UTP 24 AWG • **(4) 14 AWG** (19x27) 1.85 mm Bare Copper Conductors

Polyolefin Insulation (Pairs) • PVC Insulation (Conductors) • Overall Green F-R PVC Jacket																
	7952A	NEC:	500	152	58.0	26.3		0.289	7.34	1xData	4-Pair UTP	Unshielded	Polyolefin	F-R PVC (1) Blue	0.216	5.49
		CMR:						x	x		24 AWG					
		CEC:						0.535	13.59		0.5 mm					
		CMG FT4									Solid BC					
										4xCDR	Series 6	Unshielded	PVC	-	0.104	2.64
										4x1.93 mm ²	14 AWG		Red			
											1.85 mm		White			
											(19x27) BC		Green			
													Black			

Third party verified to TIA/EIA-568-B.2, Category 5
Jacket sequentially marked.

De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Freq. MHz	Max. Atten. dB/100m	Min. PSUM			Input Imp. (Ω)	Min. RL dB
			ft.	m	lbs.	kg		inch	mm		inch	mm			NEXT	ACR	ELFEXT		

Cat 5e • 24 AWG • Unbonded-Pairs • Solid 0.5 mm BC • Overall **Beldfoil®** Shield • Rip Cord • 24 AWG TC Drain Wire • Overall TC Braid

Polyolefin Insulation • PVC Grey Jacket																				
	1668ES	B-164	B-50	10.6	4.8	0.51 mm	0.043	1.10	Non- Bonded-Pair Overall Beldfoil® + Drain Wire (24 AWG TC) + Overall TC Braid SF/UTP	0.248	6.30	1	2.1	62.0	60.2	61.0	100 ± 15	20.0		
		1000	305	64.4	29.2	24 AWG								4	4.0	53.0	49.3	49.0	100 ± 15	23.0
		1640	500	105.8	48.0	Solid BC								8	5.7	49.0	43.1	43.0	100 ± 15	24.5
														10	6.3	47.0	41.0	41.0	100 ± 15	25.0
														16	8.0	44.0	36.2	37.0	100 ± 15	25.0
														20	9.0	43.0	33.8	35.0	100 ± 15	25.0
														25	10.1	41.0	31.2	33.0	100 ± 15	24.3
														31.25	11.4	40.0	28.5	31.0	100 ± 15	23.6
														62.5	16.5	35.0	18.8	25.0	100 ± 15	21.5
														100	21.3	32.0	11.0	21.0	100 ± 15	20.1

Color Code: see chart below
Applicable industry standards: EN 50173, ISO/IEC 11801

8-Pair, Twin

TC = Tinned Copper • BC = Bare Copper • AL = Aluminum • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • DCR = DC resistance

Duobond® Plus see technical information page 23.13.

Color Code

Pair No.	Color
1	White/Blue Stripe, Blue
2	White/Orange Stripe, Orange
3	White/Green Stripe, Green
4	White/Brown Stripe, Brown

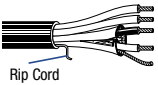
Composite Data, Audio, Video, Security and Control Cables


Multimedia Control Cables



De- scription	Part No.	UL NEC/ C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Shielding Material	Nominal Insulation OD		Compo- nent	Description	Shielding Material & Nom. DCR	Jacket Material & Colors	Insulation OD	
			ft.	m	lbs.	kg			inch	mm					inch	mm

Control • **(1) Data** 22 AWG Stranded (7x30) 0.8 mm TC • Twisted Pair with **Beldfoil®** Shield • 24 AWG TC Drain Wire • **(2) Power** 18 AWG (16x30) TC Unshielded Pair • Rip Cord

HDFPE Insulation (Data) • F-R PVC Insulation (Power) • F-R PVC Jacket (Black, White and Aqua)																
300V 75°C	1502R	NEC: CMR CEC: CMG FT4	500	152	20.1	9.1	–	Beldfoil®	0.250	6.35	1xData	1-Pair 22 AWG 0.8 mm (7x30) TC	Overall Beldfoil® 100% + Drain Wire (24 AWG TC)	HDFPE Blue White	–	–
											1xPower	2 Conductors 18 AWG 1.2 mm (16x30) TC	Unshielded	F-R-PVC Red Black	–	–
 <p>1 STP + 2 CDR Sequential footing marking every 0.6 m.</p> <p style="text-align: right;">Pulling Tension: 266 N</p>																

De- scription	Part No.	UL NEC/ C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material 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/ 100 m
22 AWG • Solid 0.6 mm Bare Copper • Twisted Pair																			
Polyolefin Insulation • White FRNC/LSNH Jacket																			
80°C	7701NH	IEC 33203C BS 7655	1000	305	10.6	4.8	0.64 mm 22 AWG Solid BC	0.046	1.17	Unshielded	0.138	3.50	100	68%	14.0	46.0	0.772	0.4	1.3
																	1	0.5	1.5
																	4	0.9	3.1
																	10	1.5	4.9
																	16	1.9	6.3
																	20	2.1	6.9
 <p>LonWorks</p> <p style="text-align: center;">Color Code: White/Blue and Blue/White</p>																			

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

Composite Data, Audio, Video, Security and Control Cables

Multimedia Control Cables



De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Color Code	
			ft.	m	lbs.	kg		inch	mm		inch	mm			pF/ft.	pF/m		
20 AWG • Solid 0.8 mm Bare Copper • Twisted Pair • Plastic Foil • 26 AWG Bare Copper Drain Wire																		
PVC Insulation • Green F-R PVC Jacket																		
300V RMS 70°C	YE00820	NEC: CMR CEC: CMR FT4	100 500 1000	30 152 305	11.5 57.3 114.6	5.2 26.0 52.0	0.81 mm 20 AWG Solid BC	0.056 1.43		Overall Alu-foil + Drain Wire (26 AWG BC)	0.276 7.00		– 73		CDR/CDR CDR/SCR	30.0 91.0	100.0 300.0	Red, Black White, Yellow
			EIB/KNX															
			Pulling Tension: 50 N															
PVC Insulation • Green F-R LSNH/FRNC Jacket																		
300V RMS 70°C	YE00906	NEC: CMR CEC: CMR FT4	100 500 1000	30 152 305	12.3 61.7 123.5	5.6 28.0 56.0	0.81 mm 20 AWG Solid BC	0.063 1.60		Overall Alu-foil + Drain Wire (26 AWG BC)	0.283 7.20		– 73		CDR/CDR CDR/SCR	30.0 91.0	100.0 300.0	Red, Black White, Yellow
			EIB/KNX															
			Pulling Tension: 50 N															
16 AWG • Stranded (19x29) 1.5 mm Tinned Copper • Twisted Pair																		
PVC Insulation • Chrome PVC Jacket																		
300V 60°C UL AWM Style 2598	8471	NEC: CMG CEC: CMG FT4	U-500 500 U-1000 1000	U-152 152 U-305 305	21.0 20.0 41.0 43.0	9.5 9.1 18.6 19.5	1.47 mm 16 AWG (19x29) TC	0.105 2.67		Unshielded	0.274 6.96		– –		CDR/CDR	30.0	100.0	Black, White
			LonWorks															
			Pulling Tension: 271 N															

TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

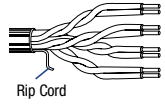
Brilliance® VideoTwist®

Low Skew UTP Cables for Video Transmission

Category and Non-Category Styles

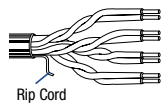


De- scription	Part No.	UL NEC/ C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Freq. MHz	Max. Atten. dB/100m	Min. PSUM			Input Imp. (Ω)	Min. RL dB	
			ft.	m	lbs.	kg		inch	mm		inch	mm			NEXT dB	ACR dB/100m	ELFEXT dB/100m			
NanoSkew™ • 24 AWG Non-Bonded-Pair • Solid 0.5 mm BC • Twisted Pair • Skew 2.2 ns/100 m Nominal • Rip Cord • Non-Category Style																				
Polyolefin Insulation • Maroon PVC Jacket																				
300V RMS 7987R NEC: CMR CEC: CMG			U-1000	U-305	22.0	10.0	0.51 mm 24 AWG Solid BC	0.038	0.97	Non- Bonded-Pair Unshielded UTP	0.195	4.95	1	2.0	-	-	-	100 ± 15	15.0	
													4	4.1	-	-	-	-	-	-
													8	5.8	-	-	-	-	-	-
													10	6.5	-	-	-	-	-	-
													16	8.2	-	-	-	-	-	-
													20	9.3	-	-	-	-	-	-
													25	10.4	-	-	-	-	-	-
													31.25	11.7	-	-	-	-	-	-
													62.5	17.0	-	-	-	-	-	-
													100	22.0	-	-	-	-	-	-
													155	28.1	-	-	-	-	-	-
													200	32.0	-	-	-	-	-	-
													250*	36.4	-	-	-	-	-	-
350*	44.8	-	-	-	-	-	-													



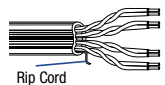
Color Code: see chart below

NanoSkew™ • Category 5e • 24 AWG Bonded-Pair • Solid 0.5 mm Bare Copper • Skew 9.0 ns/100 m Nominal • Rip Cord																			
Polyolefin Insulation • Green PVC Jacket																			
300V RMS 7988R NEC: CMR CEC: CMG FT4			U-1000	U-305	22.0	10.0	0.51 mm 24 AWG Solid BC	0.038	0.97	Bonded-Pair Unshielded UTP	0.204	5.18	1	2.0	65.3	60.3	60.8	100 ± 15	20.0
													4	4.1	53.3	49.2	48.7	100 ± 15	23.0
													8	5.8	48.8	43.0	42.7	100 ± 15	24.5
													10	6.5	47.3	40.8	40.8	100 ± 15	25.0
													16	8.2	44.3	36.0	36.7	100 ± 15	25.0
													20	9.3	42.8	33.5	34.7	100 ± 15	25.0
													25	10.4	41.3	30.9	32.8	100 ± 15	24.3
													31.25	11.7	39.9	28.2	30.9	100 ± 15	23.6
													62.5	17.0	35.4	18.4	24.8	100 ± 15	21.5
													100	22.0	32.3	10.3	20.8	100 ± 15	20.1
													155	28.1	29.5	2.0	16.9	100 ± 25	15.8
													200	32.4	27.8	1.0	14.7	100 ± 25	15.0



Color Code: see chart below

NanoSkew™ • Category 6 • 23 AWG Bonded-Pairs • Solid 0.6 mm Bare Copper • Skew 10.0 ns/100 m Nominal • Rip Cord																			
Polyolefin Insulation • Blue PVC Jacket																			
300V RMS 7989R NEC CMR CEC CMR FT4			1000	305	32.0	14.5	0.57 mm 23 AWG Solid BC	0.042	1.06	Bonded-Pair Unshielded UTP	0.365	9.27	1	2.0	72.3	70.3	64.8	100 ± 15	20.0
													4	3.8	63.3	59.5	52.7	100 ± 15	23.0
													8	5.3	58.8	53.4	46.7	100 ± 15	24.5
													10	6.0	57.3	51.3	44.8	100 ± 15	25.0
													16	7.6	54.3	46.7	40.7	100 ± 15	25.0
													20	8.5	52.8	44.3	38.7	100 ± 15	25.0
													25	9.5	51.4	41.8	36.8	100 ± 15	24.3
													31.25	10.7	49.9	39.2	34.9	100 ± 15	23.6
													62.5	15.4	45.4	30.0	28.8	100 ± 15	21.5
													100	19.8	42.3	22.5	24.8	100 ± 15	20.1
													155	25.2	39.5	14.3	20.9	100 ± 22	18.8
													200	29.0	37.8	8.8	18.7	100 ± 22	18.0
													250	32.8	36.3	3.5	16.8	100 ± 32	17.3



Color Code: see chart below

BC = Bare Copper • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • DCR = DC resistance
* Values provided for information only.

Color Code

Pair No.	Color
1	White/Blue Stripe, Blue
2	White/Orange Stripe, Orange
3	White/Green Stripe, Green
4	White/Brown Stripe, Brown

Home Cinema Audio Cables

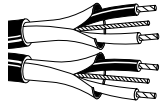
High-Conductivity (Oxygen-Free) Copper Speaker Cables



De-scription	Part No.	UL NEC / C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm			pF/ft.	pF/m	

22 AWG • Stranded Conductors (19x34) 0.8 mm TC • Dual Twisted Pair • Individual **Beldfoil®** Shield • 24 AWG Tinned Copper Drain Wire

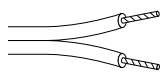
PVC Insulation • PVC Jacket in Zip-Cord Construction (Red and Green, Red and Black, Red and Violet or Red and Grey)																		
150V RMS 60°C	1504A	NEC: CM CEC: CM	U-1000 2000	U-305 610	32.0 63.9	14.5 29.0	0.79 mm 22 AWG (19x34) TC	0.010	0.25	Individual Beldfoil® + Drain Wire (24 AWG TC)	0.143 x 0.286	3.63 x 7.26	45	-	CDR/CDR CDR/SCR	57.0 100.0	187.0 328.0	Black, Red



2-Pair
610 m put-up available in Red and Grey or Red and Green only.
Pulling Tension: 111 N
The jacket and shield are bonded so both can be removed with automatic stripping equipment. Drain wire is inside foil shield.

16 AWG • Stranded (26x30) 1.5 mm High-Conductivity (Oxygen-Free) Tinned and Bare Copper

PVC Insulation • Clear PVC Jacket																		
300V RMS 60°C	9716		U-1000 1000	U-305 305	27.1 26.0	12.3 11.8	1.5 mm 16 AWG (26x30) TC/BC	0.027	0.69	Unshielded	0.115 x 0.230	2.92 x 5.84	13	-	-	-	-	Transparent



2 CDR
2x1.5 mm²
Parallel Zip Construction
Pulling Tension: 347 N

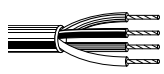
Low Cap • 16 AWG • Stranded (65x34) 1.5 mm Oxygen-Free High-Conductivity Bare Copper • Conductors Cabled

Polyolefin Insulation • PVC Jacket (Green, Blue, Grey, White and Black)																		
	1307A	NEC: CMR, CL3R CEC: CMG FT 4	U-500 1000	U-152 305	15.0 29.1	6.8 13.2	1.5 mm 16 AWG (65x34) BC	0.013	0.32	Unshielded	0.210	5.33	-	-	CDR/CDR	19.9	65.3	Black, Red



2 CDR
2x1.5 mm²
For audio use only.
305 m put-ups not available in Blue or Green.
Suitable for direct burial applications.
White and Black jackets are sunlight-resistant.
Brightly colored jackets for easy identification.
Print legends that incorporate location information (room 12345, zone ABCDE).
Cable jackets with ascending/descending sequential markings at 0.6 m intervals.
Extremely flexible, easy-to-pull constructions (highly stranded conductors; PVC jackets)

Polyolefin Insulation • PVC Jacket (Green, Blue, Grey, White and Black)																		
	1308A	NEC: CMR, CL3R CEC: CMG FT 4	U-500 1000	U-152 305	26.5 54.0	12.0 24.5	1.5 mm 16 AWG (65x34) BC	0.013	0.32	Unshielded	0.270	6.86	-	-	CDR/CDR	19.9	65.3	Black, Red



4 CDR
4x1.5 mm²
For audio use only.
305 m put-ups not available in Blue or Green.
Suitable for direct burial applications.
White and Black jackets are sunlight-resistant.
Brightly colored jackets for easy identification.
Print legends that incorporate location information (room 12345, zone ABCDE).
Cable jackets with ascending/descending sequential markings at 0.6 m intervals.
Extremely flexible, easy-to-pull constructions (highly stranded conductors; PVC jackets)

TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

Home Cinema Video Cables

Low Loss HDTV/SDI Digital Coax and SVHS Coax



De-scription	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material 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/100 m

28.5 AWG • Solid 0.3 mm Bare Copper • Duobond® • 95 % Tinned Copper Braid

Gas-Injected Foam HDPE Insulation • PVC Jacket (Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black)																			
DigiTruck®	179DT	NEC:	500	152	5.0	2.3	0.31 mm	0.056	1.42	Duobond®	0.100	2.54	75	77%	17.5	57.4	1	1.2	3.9
SDI/HDTV		CMR	1000	305	8.0	3.6	28.5 AWG			+ 95% TC							5	1.9	6.1
Digital Video 75°C		CEC:					Solid BC			Braid							10	2.4	7.8
		CMG FT4					379.2 Ω/km*			29.2 Ω/km***							67.5	5.9	19.3
							350.0 Ω/km**										71.5	6.0	19.6
																	100	6.9	22.6
																	135	7.9	25.8
																	270	10.8	35.4
																	360	12.5	41.0
																	540	15.4	50.5
																	720	17.9	58.7
																	750	18.3	60.0
																	1000	21.3	69.9
																	1500	26.3	86.3
																	2000	30.8	101.1
																	2250	32.8	107.6
																	3000	38.3	125.7



Mini Video Patch 0.3/1.4

Guaranteed Return Loss: -21dB Min.
152 m put-up available in Black only.

Nominal Delay: 4.331 ns/m
Pulling Tension: 66 N
100% Sweep tested to 3 GHz.

22 AWG • Stranded (7x29) 0.8 mm Bare Compacted Copper • 95 % Tinned Copper Double Braid

Gas-Injected Foam HDPE Insulation • PVC Jacket (Matte Black, Red, Green, Blue, Yellow, White, Orange and Violet)																			
High-Flex	1505F	NEC:	1000	305	45.0	20.4	0.76 mm	0.145	3.68	Double Braid	0.242	6.15	75	80%	17.0	55.7	1	0.2	0.7
SDI/HDTV		CM					22 AWG			95% TC							3.6	0.5	1.6
Video Patch 75°C		CEC:					(7x29) BCC			Braid							10	0.9	2.9
		CM					47.8 Ω/km*			7.8 Ω/km***							71.5	2.5	8.2
							40.0 Ω/km**										135	3.5	11.5
																	270	5.1	16.7
																	360	6.0	19.7
																	540	7.4	24.3
																	720	8.7	28.5
																	750	8.9	29.2
																	1000	10.5	34.4
																	1500	13.3	43.6
																	2250	16.9	55.4
																	3000	20.3	66.6

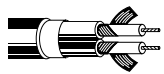
SPDIF, FBAS, Composite Video, Audio 0.8/3.7

Return loss at 5-3000 MHz: ≥ 15 dB
100% Sweep tested: 5 Mhz to 3 GHz
Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

Nominal Delay: 4.265 ns/m
Pulling Tension: 400 N

High-Flex S-video • 30 AWG • Stranded (7x38) 0.3 mm Tinned Copper • 90 % Tinned Copper Serve

Foam HDPE Insulation • Matte Black PVC Jacket (Inner PVC Jackets Color Code: Black and Yellow)																			
Round Construction	1808A	2 Coax	U-500	U-152	14.5	6.6	0.31 mm	0.058	1.47	Serve	0.255	6.48	75	78%	17.3	56.7	1	0.6	2.0
			500	152	16.5	7.5	30 AWG			90% TC							5	1.4	4.6
			U-1000	U-305	31.0	14.1	(7x38) TC			24.6 Ω/km***							10	2.1	6.9
			1000	305	33.0	15.0	352.6 Ω/km*										30	3.8	12.5
							328.0 Ω/km**										50	5.1	16.7
																	100	7.6	24.9
																	200	11.3	37.1
																	400	16.9	55.4
																	700	23.3	76.4
																	900	26.9	88.3
																	1000	28.6	93.8



Return loss at 5-3000 MHz: ≥ 15 dB

Nominal Delay: 4.265 ns/m
Pulling Tension: 52 N

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper • BCC = Bare Compacted Copper

Duobond® see technical information page 23.13.

Home Cinema Video Cables

Multicore Cables



De-scription	Part No.	UL NEC / C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material 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/100 m

25 AWG • Solid 0.5 mm Tinned Copper • Duobond® • 95 % Tinned Copper Interlocked Serve (Coaxes)

FPFA Insulation • Overall Matte Black PVC Jacket

HDTV/SDI Digital Video 60°C	NEC: CMR CEC: CMG	0.46 mm 25 AWG Solid TC 129.3 Ω/km* 111.6 Ω/km**	0.074	1.88	Duobond® 95% TC Serve 17.7 Ω/km***	75	80%	17.0	55.8	1	0.5	1.7	5	1.2	3.8	50	3.7	12.1	100	4.9	16.1	200	6.7	22.0	400	9.5	31.2	750	13.4	44.0	900	15.0	49.2	1000	15.8	51.8	3000	31.2	102.4
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Miniature
0.5/1.9

Pulling Tension:

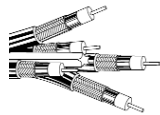
1277R	3 Coax	500	152	25.5	11.6	0.320	8.13	400 N
		1000	305	48.0	21.8			
1278R	4 Coax	250	76	21.8	9.9	0.351	8.92	489 N
		500	152	31.5	14.3			
		1000	305	60.0	27.2			
1279R	5 Coax	500	152	40.5	18.4	0.403	10.24	578 N
		1000	305	80.0	36.3			
1280R	6 Coax	500	152	44.0	20.0	0.423	10.74	601 N
		1000	305	87.0	39.5			

Nominal Delay: 4.068 ns/m
Color Code: see chart below

25 AWG • Solid 0.5 mm TC • Duobond® • 95 % TC Interlocked Serve (Coaxes) • Banana Peel® Unjacketed, Bonded to Central Spine

Foam HDPE Insulation • PVC Jacket in Colors

HDTV/SDI Digital Video 75°C	NEC: CMR CEC: CMG	0.46 mm 25 AWG Solid TC 129.3 Ω/km* 111.6 Ω/km**	0.074	1.88	Duobond® 95% TC Serve 17.7 Ω/km***	0.114	2.90	75	80%	17.0	55.8	see above
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Miniature
0.5/1.9

Pulling Tension:

1281S3	3 Coax	500	152	17.0	7.7	0.246	6.25	400 N
		1000	305	31.0	14.1			
1281S4	4 Coax	500	152	23.5	10.7	0.275	6.99	489 N
		1000	305	44.0	20.0			
1281S5	5 Coax	250	76	16.0	7.3	0.308	7.82	578 N
		500	152	28.5	12.9			
		1000	305	55.0	24.9			
1281S6	6 Coax	500	152	33.5	15.2	0.342	8.69	601 N
		1000	305	68.0	30.8			

Nominal Delay: 4.068 ns/m
100% Sweep tested. 5 MHz to 850 MHz. Patent pending.
Color Code: see chart below

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper
Duobond® see technical information page 23.13.

Color Code

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



Tools and Accessories

For Mini Hi-Res Coaxial Cables

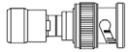


De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Pieces		Standard Unit Weight		AWG of Cable	Cable Reten- tion Force		Body Material/ Plating	Center Pin Retention		Nom. Imp. (Ω)	Current Rating	Insertion Loss
			Carton	Box	lbs.	kg		> lbs.	> kg		inch	mm			

One-Piece-Connector • Male BNC • 25 AWG (Mini RG-59) • 2-stud Bayonet Lock • Solid, One-Piece-Brass with Gold-Plated Center Pins • Patent Pending Viewing Window

Gold-Plated Construction

300V RMS 1B25A *100 10 3.8 1.7 25 AWG 40.0 18.1 Nickel Brass Compression Gold-Plated Center Pin (> 0.01 mm Gold on Beryllium Cu) 0.331 0.150 75 5 amp < 0.1 dB @ 1 GHz



* Stand packages cannot be broken.
Including termination instructions.

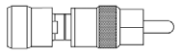
Return loss at 5-1000 MHz: ≥ 20 dB
RFI: > 100 dB

Frequency Range: DC-3.0 GHz (dependent upon cable limitations)
Can be used with video multicores 127xR and 1281Sx.

One-Piece-Connector • RCA • 25 AWG (Mini RG-59) • Solid, One-Piece-Brass with Gold-Plated Center Pins • Patent Pending Viewing Window

Gold-Plated Construction

300V RMS 1R25A *100 10 3.3 1.5 25 AWG 40.0 18.1 Nickel Brass Compression Gold-Plated Center Pin 0.331 0.150 N/A 2 amp < 0.1 dB @ 1 GHz



* Stand packages cannot be broken.
Including termination instructions.

Return loss at 5-1000 MHz: ≥ 20 dB

Frequency Range: DC-3.0 GHz (dependent upon cable limitations)
Can be used with video multicores 127xR and 1281Sx.

Stripping Tool • 3-Cut • 25 AWG (Mini RG-59)

Cable Preparation Tool

HCST 1 1 0.8 0.4 25 AWG



Can be used with video-multicores 127xR and 1281Sx.

Compression Tool • BNC/RCA die • 25 AWG (Mini RG-59)

Easy-to-Use Compression Tool

HCCT 1 1 1.8 0.8 25 AWG



Can be used with video-multicores 127xR and 1281Sx.