

BELDEN Cable™

With no overall jacket, HomeChoice® Banana Peel® Composite cables are easier and faster to install. To meet market needs, a new construction with one 4-pair Cat 5e-tested UTP and two coaxes has been added to the line.

BELDEN
HOMECHOICE®



Belden Continues Its Expansion of the HomeChoice® Banana Peel® Composite Cable Line

The Belden residential structured cabling line is comprised of a broad range of individual, dual component and composite cable constructions for the home automation, networking, security and entertainment system installation needs of the Intelligent Home.

What makes this residential cable line different is that each and every cable is manufactured to the industry's highest quality standards, utilizing the most advanced equipment, systems, controls and processes available.

Built-in Quality, Reliability and Durability

The Belden CDT Electronics Division manufactures all of the cables that make up their HomeChoice line. This is important to note because the company's quality process revolves around the concept of quality assurance, or total customer satisfaction. To achieve this goal, each cable is submitted to a comprehensive series of quality methodologies – starting with an extensive product development process

known as Design for Manufacturability (DFM). DFM ensures that the cable will yield superior product quality by targeting all critical cable attributes (electrical and physical) to meet or exceed a Cpk of 1.33 – or a 99.997% compliance rate – prior to production release.

Banana Peel Cables Provide Easy-Install Benefits

Among the composite cable choices, HomeChoice Banana Peel cable gives the residential installer the ability to pull multiple cables in a single pull, while also enabling an easier, more efficient termination process. The cables' patent-pending design affixes the individual cables to a center spline, eliminating the need for an overall jacket. This makes the cable:

- > Easy to pull – the elimination of the outer jacket means that Banana Peel cables have a smaller OD than traditional composite cables, improving the cable's overall bend radius for an easier pull.

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- > Easy to identify – without an overall jacket, all the individual data, coax and fiber cable components are all instantly identifiable and ready for termination.
- > Easy to terminate – with no overall jacket to strip off, a whole step in the termination process has been eliminated. Plus, the individual cables can just be peeled off the spline and they're ready for termination.

New 1 x 2 Cable

The new 1 x 2 cable, Product No. 7956S, is comprised of one Cat 5e 4-pair UTP for data plus two Series 6 Quad Shield video coaxes. The UTP cable is UL-verified to meet Cat 5e performance standards. It features 24 AWG solid bare copper conductors, and includes polyolefin insulation. The two Series 6 coaxes have solid bare copper conductors and Duobond® IV Quad Shields, which is a foil/braid/foil/braid design that yields excellent shielding integrity for the highest video quality. This composite cable is rated (UL)CMR/C(UL) CMG FT4 and it is available on 500 ft. and 1000 ft. reels.

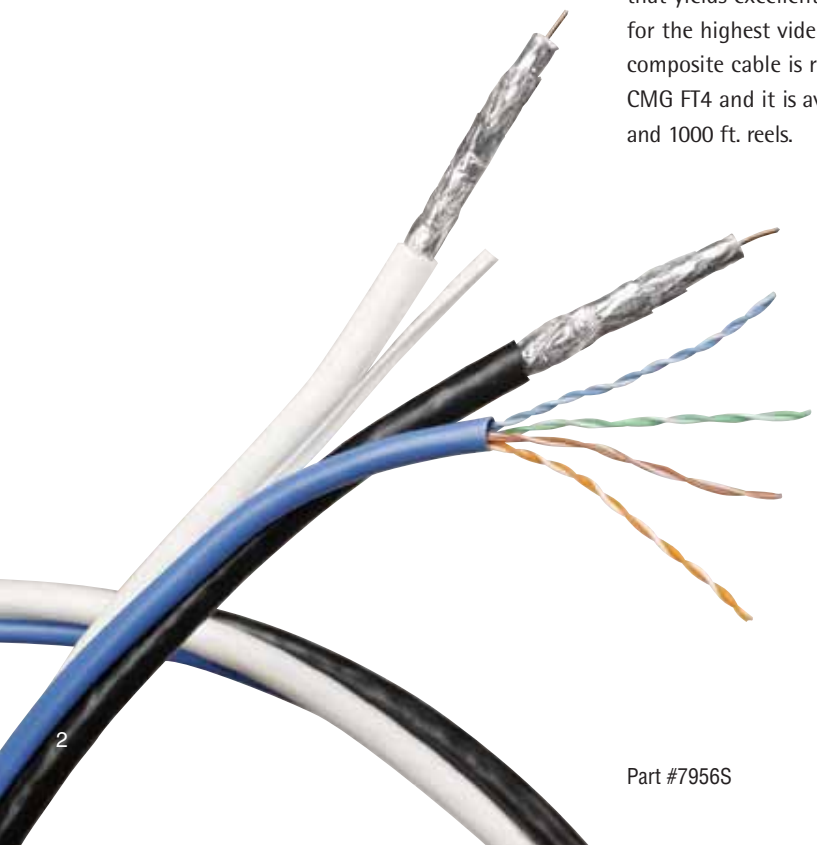
UL-Verified Category 5e Performance

HomeChoice® Banana Peel® Composite cables are UL-verified to meet Cat 5e performance standards and are available in three configurations: 2 x 2 (two data cables, two coaxes), 2 x 2 x 2 (two data cables, two coaxes and two fibers) and a 1 x 2 (one data cable and two coax).

And More...

The full residential line includes single application cables for multimedia, voice, video and data use, i.e., Category 5e and Category 6 UTPs and fiber optic cables. Series 6, RG-59 and component video coaxes can be used for HDTV, DBS, CATV, SVHS, CCTV and cable modem applications. Digital audio, speaker and interconnect cables are available for audio distribution. Paired, unshielded, coax and composite cables are also available for security and alarm applications.

The HomeChoice line includes over 20 different composite cable constructions, including both Banana Peel and traditional jacketed constructions, and offers the following cable types in the composites: fiber optic, UTPs, coax, paired and multi-conductor cables.



Part #7956S



HomeChoice® Banana Peel® Composite Cables



Part Number	Component Cables	Descriptions and Standards	Jacket Color & Type	Nominal OD (In.)	Standard Lengths (Ft.)
7956S UL verified to Cat 5e UL CMR, C(UL) CMG FT4  1 x 2	One Cat 5e 4-pair UTP cables	UTP verified (UL) to Cat 5e 24 AWG solid bare copper, polyolefin insulated	Blue FR PVC	.206	1000 500
	Two Series 6 Duobond IV Quad Shield coaxial cables	Series 6 (solid bare copper conductor) Duobond IV Quad Shield, swept to 3.0 GHz	Black & White FR PVC ▲	.298 .596	
7876S UL verified to Cat 5e UL CMR, C(UL) CMG FT4  2 x 2	Two Cat 5e 4-pair bonded UTP cables	UTP verified (UL) to Cat 5e 24 AWG solid bare copper, polyolefin insulated	Blue & Green FR PVC	.204	1000 500
	Two Series 6 Duobond Plus® coaxial cables	Series 6 (solid bare copper conductor), Duobond Plus (Bonded Tri-shield) + 80% braid, swept to 3.0 GHz	Black & White FR PVC ▲	.275 .550	
7878S UL verified to Cat 5e UL CMR OF, C(UL) CMG OF FT4  2 x 2 x 2	Two Cat 5e 4-pair bonded UTP cables	UTP verified (UL) to Cat 5e 24 AWG solid bare copper, polyolefin insulated	Blue & Green FR PVC	.204	1000 500
	Two Series 6 Duobond Plus coaxial cables	Series 6 (solid bare copper conductor), Duobond Plus (Bonded Tri-shield) + 80% braid, swept to 3.0 GHz	Black & White FR PVC	.275	
	One 2-fiber Distribution cable	Gigabit Ethernet-grade fiber 62.5/125/900/ micron tight buffered fiber	Orange FR PVC ▲	.175 .600	
7913S UL verified to Cat 5e UL CMR, C(UL) CMG FT4  2 x 2	Two Cat 5e 4-pair UTP cables	UTP verified (UL) to Cat 5e 24 AWG solid bare copper, polyolefin insulated	Blue & Green FR PVC	.194	1000 500
	Two Series 6 Duobond® IV Quad Shield coaxial cables	Series 6 (solid bare copper conductor) Duobond IV Quad Shield, swept to 3.0 GHz	Black & White FR PVC ▲	.298 .600	
7914S UL verified to Cat 5e UL CMR OF, C(UL) CMG OF FT4  2 x 2 x 2	Two Cat 5e 4-pair UTP cables	UTP verified (UL) to Cat 5e 24 AWG solid bare copper, polyolefin insulated	Blue & Green FR PVC	.194	1000 500
	Two Series 6 Duobond IV Quad Shield coaxial cables	Series 6 (solid bare copper conductor) Duobond IV Quad Shield, swept to 3.0 GHz	Black & White FR PVC	.298	
	One 2-fiber Distribution cable	Gigabit Ethernet-grade fiber 62.5/125/900/ micron tight buffered fiber	Orange FR PVC ▲	.175 .625	

FR = Flame retardant The white coax cable jacket is sequentially marked. ▲ Composite cables with no overall jacket.

HomeChoice® Banana Peel® Composite Cables

Description	No. of Pairs	Nominal OD		Max. DCR (Ohms/100m)	Max. DCR Unbal%	Max. Cap Unbal% (pF/100m)	Freq. (MHz)	Min. Psum ELFEXT (dB/100m)	Max. Atten. (dB/100m)	Min. Psum NEXT (dB)	Input Impedance (Ohms)	Min. RL (dB)
		Inch	mm									
Data Component	4	.204	5.18	9.4	5	330	1	60.8	2.0	62.3	100±15%	20.0
							10	40.8	6.5	47.3	100±15%	25.0
							16	36.7	8.2	44.3	100±15%	25.0
							31.25	30.9	11.7	39.9	100±15%	23.6
							62.5	24.8	17.0	35.4	100±15%	21.5
							100	20.8	22.0	32.3	100±15%	20.1

Bonded-Pairs

Data Component	4	.194	4.93	9.0	5	330	(Same as above)					
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Unbonded-Pairs

Description	No. of Fibers	Outer Diameter		Installation Tensile		Long Term Tensile		Maximum Attenuation		Minimum Bandwidth	
		Inch	mm	Lbs.	N	Lbs.	N	@850nm	@1300nm	@850nm	@1300nm
Fiber Component	2	.175	4.4	214	952	107	476	3.5 dB/km	1.0 dB/km	200 MHz-km	600 MHz-km

62.5/125/900 Micron (Core/Clad/Coating) Riser

Description	AWG (stranding) [Dia. in Inches] Nom. DCR	Insulation & Nominal Core OD		Nominal OD		No. of Shields & Material Nom. DCR	Nom. Imped. (Ohms)	Nom. Vel. of Prop.	Nom. Capacitance		MHz	Nom. Attenuation	
		Inch	mm	Inch	mm				pF/Ft	pF/m			
Coax Component	18 (solid) .040" Bare Copper 6.4Ω/M' 21.0Ω/km	Gas Injected FPE	.180	4.57	.275	6.99	Duobond Plus® +77% Aluminum Braid 4.6Ω/M' 15.1Ω/km	75	83%	16.2	53.1	5	.5
												55	1.4
Duobond Plus with shorting fold													
Coax Component	18 (solid) .040" Bare Copper 6.4Ω/M' 21.0Ω/km	Gas Injected FPE	.180	4.57	.298	7.57	Duobond® IV Quad Shield 4.8Ω/M' 15.7Ω/km	Black or White PVC Jacket Sweep tested 5 MHz to 3.0 GHz, 15 dB Min.				750	5.1
												862	5.5
Duobond IV Quad Shield													
												1000	6.0
												1450	7.9
												1800	8.4
												2250	10.1

Relative Shielding Effectiveness Comparison

Typical dB Isolation*	Duobond Plus 80% Braid	Quad Shield (60%/40% Braids)
5 to 50 MHz	105	105
50 to 1000 MHz	125	110

*Determined from Screening Attenuation Measurement when tested in accordance with IEC 61196-1.

For More Information:

www.belden.com

Belden Electronics Division Technical Support 1-800-BELDEN-1 or 1-800-BELDEN-3

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