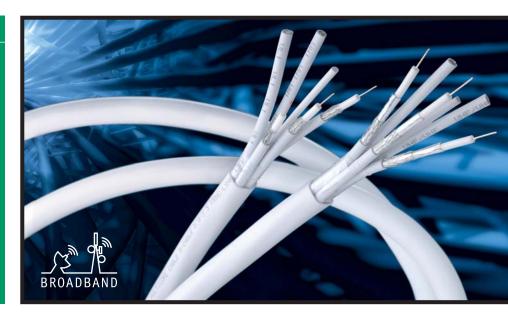


New Product Bulletin

NP 113E

Belden's CATV multicore cables deliver optimum performance in multi-switch systems and reduce installation time



Belden CATV Multicore FRNC Cables

Belden has extended its range of highly popular CATV cables with three easy-to-install bundles that deliver optimum signal transmission for MATV and SMATV. Belden's new CATV multicore cables are designed for use by CATV installers and system integrators in satellite TV (multi-switch) distribution systems. These systems provide a flexible, cost-effective way of delivering satellite signals to a wide range of users in residential, public and office buildings. They also support loop-through for terrestrial signals, allowing satellite TV to be added to a terrestrial distribution system.

Belden CATV multicore cables have the 0.8/3.5 mm dimension commonly found in European coaxial video cables. Three types are available with bundles of 2, 5 and 9, all of them with 250 and 500 m put-ups.

Belden CATV Multicore Cables now available:

H121A2C	H121A5C	H121A9C
2 x 0.8/3.5 mm	5 x 0.8/3.5 mm	9 x 0.8/3.5 mm

Easy installation

To simplify installation, each single coax is printed to make cable connection as easy as possible.

Coax	Legend
1	HH1
2	HL1
3	VH1
4	VL1
5	UHF/VHF

Coax	Legend	
6	HH2	
7	HL2	
8	VH2	
9	VL2	

Benefits and Features

Belden CATV multicore cables have a number of special features that enhance performance and facilitate installation:

- Solid copper center conductor low attenuation, easier termination
- High-velocity, low-loss PE low attenuation, long distances
- Foil under braid shielding CATV quality standard, contributes to low attenuation and is easier to terminate
- Round, uniform, matte white flexible FRNC jacket protects the cable – for professional appearance, proper boot fit, easy flexing for installation and equipment hook-up
- Minimum return loss of 18 dB between 470 to 1000 MHz
- Cold flexible up to -25° C
- For indoor and outdoor use
- Print-coded coaxes for easy identification
- Halogen-free plastic complies with IEC 60332-1 meaning no toxic gas formation and low smoke density in fire situations
- Cable jackets are meter-marked to aid tracking during installation

Applications

- MATV/SMATV
- CATV distribution systems
- Multi-switch systems for satellite TV and/or terrestrial systems



Cable Construction

The cables have solid 0.8 mm bare copper conductors. The insulation is made of gas-injected polyethylene. The shielding is Duofoil® combined with a 40% tinned copper braid. The individual coax jackets and the overall jacket are white FRNC/LSNH.

Bundled halogen-free cables are notoriously stiff and difficult to strip for termination, especially when they have to comply with IEC 60332-1.

Belden CATV multicore cables overcome both these problems because they use flexible halogen-free plastic.

Connectors

Belden CATV multicore cables are compatible with a wide range of F-style connectors.

Belden at Your Service

Belden offers a complete line of cables available from a single source. All cables are featured in the new EMEA Master Catalog (section 9).

Broadband Coax

CATV Multicore Cables

De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC		dard gths		dard Veight	Conductor (Stranding)	Nomin OD (Die	al Core electric)	Shielding Material	Nomir	al OD		Nom. Vel. of	Canac	ninal sitance	Nomin	al Attenu	uation
			ft.	m	lbs.	kg	Diameter Nom. DCR	inch	mm	Nom. DCR	inch	mm				pF/m	MHz	dB/ 100 ft.	dB/ 100 m
20 AWG	20 AWG • Solid 0.8 mm Bare Copper • Duofoil® • 40 % Tinned Copper Braid (Coaxes)																		
Gas-Inject	ed Poly	ethylene In	sulatio	ı • Ove	rall Mat	tte Whit	te FRNC/LSN	IH Jack	et										
Drop Cable 70°C		IEC 332-1					0.8 mm Solid BC 75.0 - /km*	0.138	3.50	Duofoil® + 40% TC Braid	0.197	5.00	75	84%	16.2	53.0	5 50 100	0.7 1.9 2.5	2.3 6.1 8.1

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H121A Bundled 0.8/3.5

0.8 mm	0.138	3.50	Duofoil®	0.197	5.00	75	84%	16.2	53.0	5	0.7	2.3
Solid BC			+ 40% TC							50	1.9	6.1
75.0 - /km*			Braid							100	2.5	8.1
35.0 - /km**			40.0 - /km***							230	3.6	11.9
			4.1 mm							400	4.9	16.2
										800	7.1	23.2
										862	7.3	23.9
										1000	8.0	26.1
										1350	9.4	30.7
										1750	10.8	35.3
										2150	12.0	39.4
										2400	12.8	41.9

Pul	ling	Tension

H121A2C 2 Coax Shotgun	820 1640	250 500	82.0 163.0	37.0 74.0	0.197 5.00 0.402 10.20	80 N
H121A5C 5 Coax	820 1640	250 500	128.0 254.0	58.0 115.0	0.610 15.50	200 N
H121A9C 9 Coax	820 1640	250 500	143.0 287.0	65.0 130.0	0.807 20.50	360 N

Return loss at 5-470 MHz: ≥ 20 dB 470-1000 MHz: ≥ 18 dB 1000-2000 MHz: ≥ 16 dB 2000-3000 MHz: ≥ 15 dB Screening attenuation at 30-1000 MHz: > 75 dB Transfer impedance at 5-30 MHz: < 45.0 m- /m Screening Class: C

Each coax has a white FRNC/LSNH jacket.

Coax	Legend	Coax	Legend
1	HH1	4	VL1
2	HL1	5	UHF/VHF
3	VH1	6	HH2

Coax	Legend	
7	HL2	
8	VH2	
9	VL2	

^{*} DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • BC = Bare Copper • TC = Tinned Copper