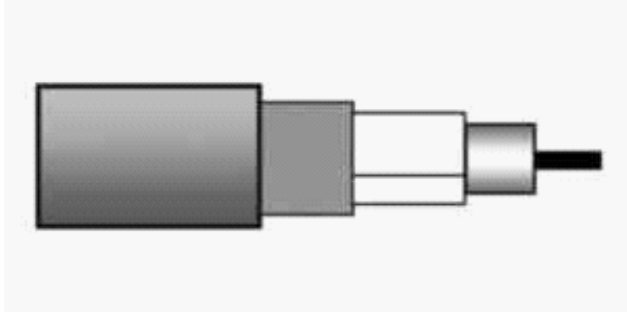


**Part Number:** H121A01.001000  
COAXH121 AL PE CATV



## Product Description

COAX[0.8/3.5] H121 AL PE CATV

## Product Specifications

### Application

Suitable Applications:	Coaxial cables used in cabled distribution networks designed according to the European Standard EN 50117-2-2 and EN 50117-2-5; Operating at frequencies between 5 MHz and 3000 MHz
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## Technical Specifications

### Applicable Patents

Patent:	<a href="http://www.belden.com/p">http://www.belden.com/p</a>
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### Bend Radius

Min Bend Radius (W/o Pulling Strength):	25 mm
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### CCB-Sub-Crush Resistance

Crush Resistance:	Max. 1% (load of 700N) N
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### CCB-Sub-Material

Min Elongation at Breakof Jacket:	300 %
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Min Tensile Strength of Jacket:	10 MPa
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### EMEA Standard

CENELEC Compliance:	EN 50117-2-2, EN 50117-2-5 and EN 50117-1
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## General Electrical Parameters

Min Insulation Resistance:	10000 MOhm*km
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## History

Revision Date (yyyy-mm-dd):	2008-01-21
Revision Number:	4

## Stripping Performance

Adhesion Dielectric:	6.3-63 N at 25 mm N
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## Impedance:

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance
75 Ohm	±3 Ohm	Min. 40 dB

## Conductor DCR:

Max. Conductor DCR	Max. Conductor Loop	Max. Shield DCR
35 Ohm/km	75 Ohm/1000ft	40 Ohm/km

## Delay:

Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
84 %	±2 %

## Voltage:

Voltage Test Dielectric
2 kV DC

## High Freq:

Element	Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 30 MHz		20 dB
30 - 470 MHz		20 dB
470 - 1000 MHz		18 dB
1000 - 2000 MHz		16 dB
2000 - 3000 MHz		15 dB

In each frequency band, 3 peak values up to 4 dB lower are allowed

### Screening:

Frequency [MHz]	Min. Screening Attenuation	Min. Screening Attenuation After Flexing
30 - 1000 MHz		75 dB
1000 - 2000 MHz		65 dB
2000 - 3000 MHz		55 dB

### Transfer Impedance:

Frequency [MHz]	Transfer Impedance
5-30 MHz	Max. 50 mOhm/m

### PB HD-SDI Coax Table:

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 ()	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			
<b>COAX [0.8/3.5] H121 AL PE CATV</b>															
COAX [0.8/3.5] H121 AL PE CATV															
SDI/HDTV	NEC	Hard Code	Hard Code	3.5 mm	Hard code	Aluminum / Polyester / Aluminum		5 mm	Hard Code	84 %	53 pF/m	Hard Code	5 MHz	2.3 dB/100m	Hard Code
Digital Video					Solid		Tape		50 MHz		5.9 dB/100m				
	CEC		0.8 in		37 %		100 MHz	8.1 dB/100m							
	Bare copper				Tinned copper				230 MHz		12.1 dB/100m				
	Braid				400 MHz			15.9 dB/100m							
	Hard Code				22.7 dB/100m										

### Capacitance:

Nom. Capacitance	Capacitance Tolerance
53 pF/m	2 pF/m

### High Frequency (Nominal/Typical):

Element	Frequency [MHz]	Nom. Insertion Loss
5 MHz		2.3 dB/100m
50 MHz		5.9 dB/100m
100 MHz		8.1 dB/100m
230 MHz		12.1 dB/100m

400 MHz	15.9 dB/100m
800 MHz	22.7 dB/100m
862 MHz	23.6 dB/100m
1000 MHz	25.6 dB/100m
1350 MHz	30 dB/100m
1750 MHz	34.5 dB/100m
2150 MHz	39.6 dB/100m
2400 MHz	41 dB/100m
3000 MHz	45.9 dB/100m
Max. attenuation 10% higher	

### Insulation:

Type	Material	Nominal Diameter	Diameter +/- Tolerance	
Dielectric	Foamed Polyethylene		3.5 mm	0.15 mm

### Outerjacket 1:

Element	Material	Nominal Diameter	Diameter +/- Tolerance	
Polyethylene		5 mm		0.3 mm

According to European Standard HD 624

### Conductor:

Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	
Solid	Bare copper	0.8 in		0.015 mm

### Other Electrical Information:

Min Insulation Resistance	10000 MOhm*km
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### Outershield 1:

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Tape	1	Aluminum / Polyester / Aluminum					2 mm
Braid	2	Tinned copper	37 %		4.1 mm	0.15 mm	4 %

## Product Variants

Part Number	Color	Put-Up Type	Length
H121A01.001000	BLACK	Reel	1000 m
H121A01.005000	BLACK	Reel	5000 m
H121A01.00500	BLACK	Reel	500 m
H121A01.00B100	BLACK	Reel	100 m
H121A01.001000			

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