

## 7914A Composite - Composite Data, Audio, Video, Security and Control Cable



For more Information  
please call

1-800-Belden1



### General Description:

Composite - (2)Cat 5 4-pair, 24 AWG unshielded plus (2)Series 6 Coax with Duobond® IV Quad Shield plus (1)2-Fiber LANLite®, polyolefin insulation on the pairs; Gas-injected FPE insulation on the coaxes, F-R PVC jackets, overall F-R PVC jacket.

### Usage (Overall)

Suitable Applications:

HDTV, DBS, CATV, CCTV, Multimedia, Voice, Video, Data, High Speed Internet, Networked Computing, Distributed Video, Distributed Audio, Security Monitoring, Energy Monitoring

### Coax

#### Physical Characteristics

##### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
2	18	Solid	BC - Bare Copper	0.040

##### Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	0.180

##### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	AL - Aluminum	60.000
3		Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
4		Braid	AL - Aluminum	40.000

##### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.298

Outer Jacket Color Code Chart:

Number	Color
1	Black
2	White

### Applicable Specifications and Agency Compliance

#### Applicable Standards & Environmental Programs

EU CE Mark:

Yes

### Electrical Characteristics

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/ft)
0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.200

Nominal Velocity of Propagation:

VP (%)
83.000

## 7914A Composite - Composite Data, Audio, Video, Security and Control Cable

### Nominal Delay:

Delay (ns/ft)
1.200

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
6.400

### Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.800

### Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5.000	1000.000	20.000
1000.000	2250.000	15.000
2250.000	3000.000	10.000

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5.000	0.500
55.000	1.400
211.000	2.600
500.000	4.100
750.000	5.100
862.000	5.500
1000.000	6.000
1450.000	7.800
1800.000	8.600
2250.000	9.800
3000.000	11.300

### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5.000	0.670
55.000	1.600
211.000	2.870
500.000	4.480
750.000	5.590
862.000	5.980
1000.000	6.540
1450.000	8.000
1800.000	8.800
2250.000	10.000
3000.000	11.900

### Max. Operating Voltage - UL:

350 V RMS

### Shield Effectiveness:

Start Frequency (MHz)	Stop Frequency (MHz)	Shield Effectiveness (dB)
5.000	50.000	105.000
50.000	1000.000	110.000

## Twisted Pair

### Physical Characteristics

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
8	24	Solid	BC - Bare Copper	0.020

#### Insulation

##### Insulation Material:

Insulation Material	Dia. (in.)
PO - Polyolefin	0.035

##### Twisted Pair Color Code Chart:

Number	Color
1	White/Blue Stripe and Blue
2	White/Orange Stripe and Orange
3	White/Green Stripe and Green
4	White/Brown Stripe and Brown

#### Outer Jacket

##### Outer Jacket Material:

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**Outer Jacket Material**  
 PVC - Polyvinyl Chloride

**Outer Jacket Diameter:**

**Nom. Dia. (in.)**  
 0.195

**Outer Jacket Color Code Chart:**

Number	Color
1	Blue
2	Green

**Electrical Characteristics**

**Nom. Mutual Capacitance:**

**Capacitance (pF/ft)**  
 15.000

**Nominal Velocity of Propagation:**

**VP (%)**  
 70.000

**Nom. Conductor DC Resistance:**

**DCR @ 20°C (Ohm/1000 ft)**  
 9.380

**Max. Operating Voltage - UL:**

**Voltage**  
 300 V RMS

**Other Electrical Characteristic 1:**

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

**Premise Cable Electricals:**

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. SRL (dB)	Fitted Imp. (Ohms)
1.0	2.000	62	23	100 ± 15%
4.0	4.100	53	23	100 ± 15%
8.0	5.800	48	23	100 ± 15%
10.0	6.500	47	23	100 ± 15%
16.0	8.200	44	23	100 ± 15%
20.0	9.300	42	23	100 ± 15%
25.0	10.400	41	22	100 ± 15%
31.25	11.700	39	21	100 ± 15%
62.5	17.000	35	18	100 ± 15%
100	22.000	32	16	100 ± 15%

**Fiber****Physical Characteristics**

**Fiber Type:** 62.5/125/900 Micron

**Number of Fibers:** 2

**Fiber Color Code Chart:**

Number	Color
1	Blue
2	Orange

**Outer Jacket**

**Outer Jacket Material:**

**Outer Jacket Material**  
 PVC - Polyvinyl Chloride

**Outer Jacket Diameter:**

**Nom. Dia. (in.)**  
 0.175

**Outer Jacket Color:** Orange

**Physical Characteristics (Overall)****Outer Shield**

**Outer Shield Material:**

**Outer Shield Material**  
 Unshielded

**Outer Jacket**

**Outer Jacket Material:**

**Outer Jacket Material**  
 PVC - Polyvinyl Chloride

**7914A Composite - Composite Data, Audio, Video, Security and Control Cable****Overall Cable**

Overall Nominal Diameter:	0.660 in.
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**Mechanical Characteristics (Overall)**

Bulk Cable Weight:	164 lbs/1000 ft.
Max. Recommended Pulling Tension:	278 lbs.
Min. Bend Radius/Minor Axis:	6.500 in.

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMR, OF
CEC/C(UL) Specification:	CMG, OF
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801, Category 5
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	07/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	ANSI/TIA/EIA-568B.2, Category 5
Other Specification:	NEMA WC-63.1, Category 5

**Flame Test**

UL Flame Test:	UL1666 Riser
C(UL) Flame Test:	FT4

**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**Notes (Overall)**

**Notes:** Overall jacket sequentially marked. Shielding effectiveness determined from screening attenuation measurement when tested in accordance with IEC 61196-1.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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Revision Number: 0    Revision Date: 02-08-2008

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