

## 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:

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

**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.
---------------------------	-----------

**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
---------------	----

**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
--------	-------	-------------	-------	-------	-----------

Revision Number: 0    Revision Date: 02-08-2008

© 2014 Belden, Inc.  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.