

## 7916A Coax - Series 6

For more Information  
please call

1-800-Belden1



### General Description:

Series 6, 18 AWG solid .040" bare copper conductor, gas-injected foam polyethylene insulation, Duobond® + aluminum braid shields (60% and 40% coverage), PVC jacket (black or white).

### Usage (Overall)

Suitable Applications: HDTV, DBS, Broadband CATV, Cable Modem

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BC - Bare Copper	.040

Total Number of Conductors: 1

#### Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FPE - Foam Polyethylene	.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
2		Braid	AL - Aluminum	60
3	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
4		Braid	AL - Aluminum	40

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 0.298 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +80°C

Bulk Cable Weight: 33 lbs/1000 ft.

Max. Recommended Pulling Tension: 104 lbs.

Min. Bend Radius/Minor Axis: 3 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CATV, CM

CEC/C(UL) Specification: CM

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

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

Series Type: Series 6

**Flame Test**

UL Flame Test: UL1685 UL Loading

**Plenum/Non-Plenum**

Plenum (Y/N): No

Plenum Number: 7916AP

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

Impedance (Ohm)  
75.000

**Nom. Inductance:**

Inductance (µH/ft)  
.097

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/ft)  
16.2

**Nominal Velocity of Propagation:**

VP (%)  
83

**Nominal Delay:**

Delay (ns/ft)  
1.2

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)  
6.4

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)  
4.8

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.5
55	1.4
211	2.6
500	4.1
750	5.1
862	5.5
1000	6.0
1450	7.8
1800	8.6
2250	9.8
3000	11.3

**Max. Attenuation:**

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.67
55	1.60
211	2.87
500	4.48
750	5.59
862	5.98
1000	6.54
1450	8.00
1800	8.80
2250	10.0
3000	11.9

**Max. Operating Voltage - UL:**

Voltage  
300 V RMS

**Shield Effectiveness:**

Start Freq. (MHz)	Stop Freq. (MHz)	Effectiveness (dB)
5	50	105

# Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

7916A Coax - Series 6

50	1000	110
----	------	-----

**Typical Structural Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Typical SRL (dB)
5	1000	30
1000	3000	24

**Minimum Structural Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5	1000	20
1000	2250	15
2250	3000	10

**Sweep Test**

Sweep Testing: 5 MHz - 3 GHz

**Notes (Overall)**

Notes: 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
7916A 009U1000	1,000 FT	36.000 LB	WHITE		#18 LDPE/GIFHDLPE DBSH PVC
7916A 009U500	500 FT	18.500 LB	WHITE		#18 LDPE/GIFHDLPE DBSH PVC
7916A 009I1000	1,000 FT	35.000 LB	WHITE	C	#18 LDPE/GIFHDLPE DBSH PVC
7916A 009I500	500 FT	19.500 LB	WHITE	C	#18 LDPE/GIFHDLPE DBSH PVC
7916A 010U1000	1,000 FT	36.000 LB	BLACK		#18 LDPE/GIFHDLPE DBSH PVC
7916A 010U500	500 FT	18.500 LB	BLACK		#18 LDPE/GIFHDLPE DBSH PVC
7916A 010I1000	1,000 FT	35.000 LB	BLACK	C	#18 LDPE/GIFHDLPE DBSH PVC
7916A 010I500	500 FT	19.500 LB	BLACK	C	#18 LDPE/GIFHDLPE DBSH PVC
7916A 010I5000	5,000 FT	190.000 LB	BLACK	C	#18 LDPE/GIFHDLPE DBSH PVC

**Notes:**

C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 08-13-2012

© 2015 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.