

## 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
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**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

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